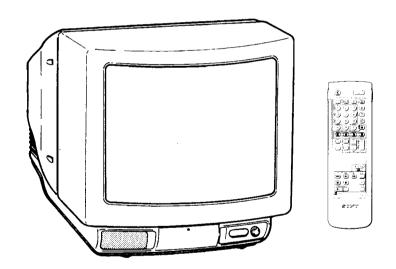
# **SERVICE MANUAL**

# BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-M2540E	) RM-833	AEP	SCC-G77G-A	KV-M2541E	RM-833	Spanish	SCC-G82E-A
KV-M2541E	) RM-833	AEP	SCC-G77F-A	KV-M2541L	RM-833	IRISH	SCC-G83D-A
KV-M2541A	RM-833	Italian	SCC-G81F-A	KV-M2541L	RM-833	UK	SCC-G87D-A
KV-M2540E	RM-833	French	SCC-G85F-A	KV-M2540k	<b>/</b> RM-833	OIRT	SCC-G86E-A
KV-M2540E	RM-833	Spanish	SCC-G82F-A	KV-M2541k	/ RM-833	OIRT	SCC-G86D-A







ITEM MODEL	Television System	Channel Coverage	Color System
AEP	B/G/H, D/K	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Italian	B/G/H	ITALIA VHF:A-H2 (C) UHF: 21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, L, 1	L VHF:F02-F10 UHF:F21-F60 CABLE:B-Q B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UFH:21-69 I UHF: B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO-IN)
Spanish	B/G/H	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69	PAL NTSC4.43, NTSC3.58 (VIDEO-IN)
lrish	ı	VHF: A-J C10 (224MHZ) UHF: E21-E69 CABLE SO1-S41	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
UK	1	UHF: B21-B69	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H	B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 D/K VHF:RO1-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	AEP Text	AEP Non Text	Italian	French Non Text	Spanish Text	Spanish Non Text	Irish	UK	OIRT TEXT	OIRT NON TEXT
Power Consumption	85W	85W	85W	85W	85W	85W	109W	109W	85W	85W

#### **SPECIFICATIONS**

Picture Tube

Hi-Black Trinitron

Approx. 63 cm (25 inches)

(Approx. 60 cm picture measured

diagonally)

110° -deflection

### **Input/Output Terminals**

#### [REAR]

Ö-1 21-pin Euro connector (CENELEC standard)

- inputs for audio and video signals

inputs for RGB

- outputs of TV video and audio signals

[FRONT]

€2Video input - phono jack

→2 Audio inputs - phono jacks

€32S video input 4-pin DIN

Ω Headphone jacks : stereo minijack

Sound output

10W (Music)

Power requirements

220 - 240V

Dimensions

Approx. 500x580x520 mm

Weight

Approx. 43kg

Supplied accessories

RM-833 Remote Commander (1)

IEC designation R6 battery (1)

Other features

FASTEXT, TOPTEXT.

[RM-833]

Remote control system

infrared control

Power requirements

1.5V dc

1 battery IEC designation

R6 (size AA)

Dimensions

Approx. 65x225x21 mm (w/h/d)

Weight

Approx. 157g (Not including batteries)

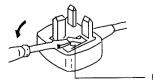
Design and specifications are subject to change without notice.

name Model	KV-M2541A	KV-M2540B	KV-M2540D	KV-M2541D	KV-M2540E	KV-M2541E	KV-M2540K	KV-M2541K	KV-M2541L	KV-M2541U
Item '										
RGB Priority	ON	ON	OFF							
Scart 1	ON									
Front in (3)	ON									
AKB in 16:9 mode	ON									
Norm B/G Norm I	ON OFF	ON OFF	ON OFF	ON	ON	ON	ON OFF	ON OFF	OFF	OFF
Norm D/K	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
Norm AUS	OFF									
Norm L	OFF	ON	OFF							
Teletext	ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON
I GIGIGAL	ON .	011	011		011	0,1			-	
Language Preset	Italian	French	Deutch	Deutch	Spanish	Spanish	OIRT	OIRT	English	English

### WARNING (KV-M2541L/KV-M2541U only)

The flexible mains lead is supplied connected to a **B.S.** 1363 fused plug having a fuse of 5 AMP capacity. Should the fuse need to be replaced, use a 5 AMP FUSE approved by ASTA to BS 1362, ie one that carries the mark.

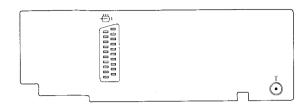
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME. IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET. When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.

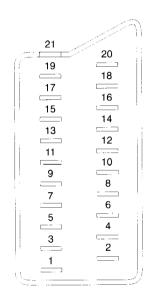


How to replace the fuse. Open the fuse compartment with the screwdriver blade and replace the fuse.

FUSE

### 21 pin connector ( ö-1 )





Pin No.	1	2	4	Signal	Signal level
1	0	0	0	Audio output B	Standard level : 0.5V rms
'				(right)	Output impedance : Less than 1kohm*
2	0	0		Audio input B	Standard level : 0.5V rms
2			0	(right)	Output impedance : More than 10kohm*
3	0	0		Audio output A	Standard level: 0.5V rms
3			0	(left)	Output impedance : Less than 1kohm*
4	0	0		Ground (audio)	
5	0	0	0	Ground (blue)	
6		0	0	Audio input A	Standard level : 0.5V rms
				(left)	Output impedance : More than 10kohm*
7	0	•	•	Blue input	0.7 ± 3dB, 75 ohms, positive
					High state (9.5 - 12V) : Part mode
8	0		lo	Function select	Low state (0 - 2V) : TV mode
O			I	(AV control)	Input impedance : More than 10k ohms
					Input capacitance : Less than 2nF
9	0	0	0		
10	0	0			
11	0	•		Green	Green signal: 0.7 ± 3dB, 75 ohms, positive
12	0	0		Open	
13	0			Ground (red)	
14	0		0	Ground(blanking)	
	0	_	_	Red input	$0.7 \pm 3$ dB, 75 ohms, positive
15	-	0	0	(S signal) croma input	0.3 ± 3dB, 75 ohms, positive
16	0			Blanking input	High state (1 - 3V) Low state (0 - 0.4V)
סו		•	_	(Ys signal)	Input impedance : 75ohms
17				Ground(video	
'/	0	0	0	output)	
18	_		_	Ground(video	
10	0	0	0	input)	
19	0	0		Video output	$1V \pm 3dB,75$ ohms,positive sync: $0.3V(-3+10dB)$
	0	_		Video input	1V ± 3dB,75ohms,positive sync: 0.3V(-3+10dB)
20	-	0	0	Video input	1V ± 3dB,75ohms,positive sync: 0.3V(-3+10dB)
				Y (S signal)	TV 2 00D, 100HH3, positive syrio. 0.5 V (0+100D)
21	0	0	0	Common ground	
اعا	$\Gamma$			(plug, shield)	

Connected

Not Connected (open)

\* at 20Hz - 20kHz

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	$1V \pm 3dB$ 75 ohm , positive Sync. 0.3V -3/+10 dB
4	C (S signal) input	0.3V ± 3dB 75 ohm , positive Sync.



### TABLE OF CONTENTS

Seci	tion	<u>Title</u>	<u>Page</u>		Sectio	<u>Title</u>	Page
1. (	GEN	ERAL		5.	DIA	GRAMS	
		Getting Started	6		5-1.	Block Diagram	29
		Advanced TV Operations	8		5-2.	Circuit Board Location	34
		Adjusting the Picture	8		5-3.	Schematic Diagrams and	
		Advanced Presetting Functions	10			Printed Wiring Boards	34
		Teletext Operation	11			* H1 Board	35
		Connecting Other Equipment	12			* H2 Board	35
		For Your Information	13			* H3 Board	35
						* F1 Board	36
2. [	DISA	ASSEMBLY				* D Board	39
2-	-1.	Rear Cover Removal	16			* A Board	44
	-2.	Chassis Assy Removal	16			* C Board	53
	-3.	Service Position			5-4.	Semiconductors	55
2-	-4.	A Board Removal	17	_			
2-	-5.	Extension Board		6.	EXI	PLODED VIEWS	
2-	-6.	Picture Tube Removal	18		6-1.	Chassis	57
		_			6-2.	Picture Tube	58
3.	SET-	-UP ADJUSTMENTS					
3.	-1.	Beam Landing	19				
3-	-2.	Convergence	20	7.	ELE	ECTRICAL PARTS LIST	59
3-	-3.	Focus	22				
3-	-4.	White Balance	22				
4.	CIRC	CUIT ADJUSTMENTS				ATTENTION	
4.	-1.	Electrical Adjustments	23			ATTENTION	
	-2.	Test Mode 2			APRE	S AVOIR DECONNECTE LE CAP DE L'ANODE,	
	-3.	BE3 Self Diagnostic Software	27		COUI	RT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ELUI DE L'ANODE DU CAP AU CHASSIS ALLIQUE DE L'APPAREIL. OU AU COUCHE DE	

#### CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

#### WARNING!!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD, DUE TO A LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARKED . . ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLIMENTS PUBLISHED BY SONY.

CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

### ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTEMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

#### ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ!!

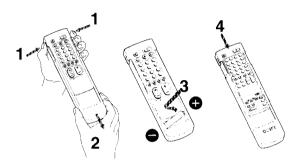
LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ! SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

# SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.



# Inserting the Battery Into the Remote Commander



Remove the cover.

Check the correct polarity.

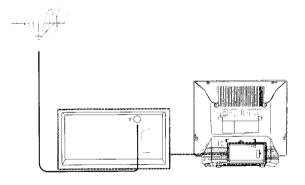
Refit the outside cover making sure that the Full Function side is visible.

### **About Battery Life**

Under normal operation, a battery will last up to half a year.

### **Connecting the Aerial**

Connect aerial to the  $\ \ \ \ \$  socket at the rear of the TV. (cable not supplied)



# **Choosing a Language**

(See inside of front cover and back cover)

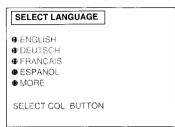
**1** Depress ⊕ A on the TV. The TV turns on. If the standby indicator B on the TV is lit, press ⊖ 3 or any number button 4 on the Remote Commander.

Press MENU 7 on the Remote Commander.
The SELECT LANGUAGE screen appears.



Press one of the colour buttons 17 on the Remote Commander to select a language (Press the white button 17 to display other language alternatives).

The SELECT LANGUAGE screen clears and all subsequent menus appear in the chosen language.



**Note:** From the second time when you turn on the TV, the MENU screen appears instead of the SELECT LANGUAGE screen. Press the yellow button **17** then press the white button **17** to redisplay the SELECT LANGUAGE screen.

### **Tuning in to Channels**

You can tune in up to 60 channels to programme positions either automatically or manually.

auto tuning:

A single button press allows all receivable channels to be tuned. Use if you are unfamiliar with the channel numbers of stations.

manual tuning:

Use if you are familiar with the channel numbers of stations. (Channel numbers from the main UK transmitters are shown on page 13)

Choose the more appropriate way for you.

#### **Tuning in to Channels Automatically**

There are two possibilities for auto tuning;

A. On the TV: hold down on the front of the TV for 2 seconds (All receivable channels are tuned in the order noted below).

or

B. On the Remote Commander: as follows

1 Press MENU 7.

**7** Press the yellow button  $\boxed{17}$ .

**?** Hold down the red button 17 for 2 seconds,

**Note:** Press the green button 17 to cancel.

Channels are au	tomatically stored as follo	ws:
	KV-M2541U	KV-M2541L
Programme1	BBC1	RTE1
Programme2	BBC2	RTE2
Programme3	ITV	BBC1
Programme4	CH4 or S4C	BBC2
Programme5	_	ITV
Programme6		CH4 or S4C

**Note:** Programme names are automatically taken from TELETEXT if available. If not, "----" is placed in the name.

- If you connect a VCR via the aerial cable, set the VCR to its test signal or play mode before auto-tuning.
- You may have to exchange the programme positions, if there are duplicated signals from local transmitters

### **Tuning in to Channels Manually**

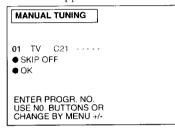
Press MENU 7. The MENU screen appears. MENU

Press the yellow button 17 to select PRESET. The PRESET screen appears.

PRESET AUTO TUNING ● MANUAL TUNING • PROGR EXCHANGE ● EDIT PROGR NAME • FINE TUNE SELECT COL BUTTON

Press the green button 17 to select MANUAL TUNING.

The MANUAL TUNING screen appears.

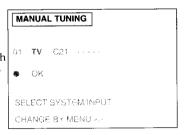


 $\mathbf{\Lambda}$  Press the number buttons  $\mathbf{4}$  or MENU+/-  $\mathbf{9}$  to select a programme position.

If you use the number buttons 4, enter a double-digit number. (e.g. for programme number 4, first press 0, then 4)

 $\mathbf{5}$  Press the green button  $\mathbf{\overline{17}}$ .

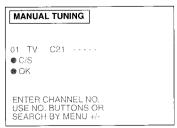
Note: Use MENU +/- 9 to select "TV". You can alternatively select input sources which may be assigned to programme positions. The display changes as follows:





 $\mathbf{6}$  Press the green button  $\overline{17}$ .

Note: If a video input source is selected in step 5, this is now stored. Refer to step 4 to tune other programme positions.



(KV-M2541L only) Press the red button 17 to select C (regular channel) or S (cable channel).

Press the number buttons 4 or MENU+/- 9 to select the channel number.

If you use the number buttons 4, enter a double-digit number. (e.g. for channel 23, first press 2, then 3)

Note: Programme names are automatically taken from TELETEXT if available. If not, "----" is placed in the name. Or if you select AV1, RGB, AV2 or YC2 as an input source, AV1, RGB, ... is placed.

• Press the green button 17 to store.

Note: If you want to preset other channels, repeat steps

Press MENU 7 twice to return to the normal

Note: You can skip unused programme positions when selecting programmes with the PROGR +/- buttons 18 Press the red button 17 to skip in step 4. However, the skipped programmes may still be called up when you use the number buttons.

### **Basic TV Operations**

### Turning the TV on and off

Turning on

Depress ① A on the TV.

Turning off temporarily

Press & 10 on the Remote Commander. The TV enters standby mode and the standby indicator B

on the front of the TV lights up.

**Turning on again** Press  $\bigcirc$  3, PROGR+/- 18, or one of the number buttons 4 on the Remote Commander.

Turning off completely

Depress ① A on the TV.

**Note**: It is recommended to use **O A** to turn off the TV. This could help you save energy.

**Selecting TV Programmes** 

Press PROGR+/- **18** or press number buttons **4**.

To select a double-digit number

Press -/-- **5**, then the number buttons **4**.

#### Adjusting the Volume

Press 4+/- 19.

### Muting the Sound

Press 🕸 🚺

To resume normal sound, press 🕸 🚺 again.

Displaying the On-screen Indications

Press (14) once to display the on-screen indications. Press again to make the indications disappear.

Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can adjust or select the functions as follows

Press  $+/-\boxed{D}$  to adjust the volume. Press P+/- $\boxed{C}$  to select programme numbers or to turn the TV on from the standby mode.

Press to select the input source.

Press **E** to preset channels automatically.

# Advanced TV Operations

# **Operating the Menu System**

You can adjust picture, preset channels to programme positions and utilise other convenient features by using the following menu system.

Pres	ss;	to;
1	MENU 7	enter the MENU screen
2	a colour button 17	select an item you want to change (The selected item is marked by a triangle.)
3	MENU+/- 9 + -	change (or adjust) the contents of the item
4	MENU 7	return to the MENU screen
5	MENU 7 again	return to the normal screen
Pre	ss MENU 7 once or t	wice whenever you want to

**Note:** When selecting menus, the picture becomes darker. If, however, an item in the PICTURE ADJUSTMENT menu is selected, normal level of TV picture is restored to allow the best adjustment.

# **Adjusting the Picture**

Although picture is adjusted at the factory you can adjust it to suit your own taste.

1	Press MENU 7.
	The MENU screen appears

return to the normal screen.



7	Press	the re	d button	17 to	select	PICTURE.
---	-------	--------	----------	-------	--------	----------

**3** Press the respective colour button 17 to select an item.

4 Press MENU +/- 9 to adjust.

Press MENU T twice or wait until the menu displays disappear automatically to return to the normal screen.

### **PICTURE ADJUSTMENT**

(First Page)

<b>≱</b> :}	
● ③	
<b>⊕</b> ∵	
• (D	144141411111111111111111111111111111111
MOR	E

Press colour button	Effect
Red: For Picture ①	Less ——— More
Green: For Colour ③	Less ——I—— More
<b>Yellow:</b> For Brightness $\circ$	Darker ———— Brighter
Blue: For Sharpness ①	Softer ———— Sharper
White:	Next page of PICTURE ADJUSTMENT

### PICTURE ADJUSTMENT

(Second Page)

COLOUR TONE NORMAL NOISE REDUCE ON FORMAT NORMAL OLD HUMBHININGS (SEEMINGHIN) BACK	PICTUR	E ADJUSTMENT
●FORMAT NORMAL •☑ ====================================	•coloi	JR TONE NORMAL
◆c≰ze nanamannan-ser (cenanamann	NOISE	REDUCE ON
	•FORM	AT NORMAL
<b>B</b> ACK	e is si	- populari populari de la compositional
	• BACK	
	• 671611	
SELECT COL. BUTTON	oe: com	COS DUITTON

Press colour button	Effect
<b>Red:</b> For Colour Tone	Normal -> Warm (reddish colour tone) -> Cool (blueish colour tone)
<b>Green:</b> For Noise Reduce	ON: Reduces picture noise (in case of low signal level) OFF: Normal setting
<b>Yellow:</b> For Format	Normal: Normal setting 16:9 Wide screen effect
Blue: For Hue control 🗳 (only for NTSC video signals)	Reddish ———— Greenish
White:	Back to first page of PICTURE ADJUSTMENT

**Note:** Press → • ◆ 8 on the Remote Commander to reset to the factory preset levels for picture.

# **Using Special Features**

With your TV you can utilise special features such as Parental Lock or Sleep Timer.

Press MENU 7. The MENU screen appears.

MENU

2 Press the green button 17 to select FEATURES.

Press the respective colour button 17 to select an

4 Press MENU +/- 9 to change.

**5** Press MENU 7 twice or wait until the menu displays disappear automatically to return to the normal

### **FEATURES**

### FEATURES

- ➤ SLEEP TIMER OFF

  ◆ PARENTAL LOCK OFF

   TV BUTTON LOCK OFF
- DEMO MODE
- LANGUAGE

SELECT COL. BUTTON CHANGE BY MENU +/-

Press colour button	Effect
Red:	
For Sleep Timer	OFF -> 0:30 -> 1:00 -> 1:30 -> 2:00 (hours)
(Automatic	After the selected time the TV set
switch off	switches itself automatically into
function)	standby mode.
<b>Green:</b> For Parental Lock (For preventing children from	OFF: Normal setting ON: The TV-channel you are watching is now blocked. In this way
watching	you can prevent undesirable
programmes	broadcasts from appearing on the
which you	screen.
consider	
unsuitable)	
Yellow	
For TV Button Lock	OFF: Normal setting
	ON: The buttons on the TV do not
	function anymore. (The Remote Commander still
	operates)
Blue:	ONL Aistumes
For Demo Mode	ON: A sequence of menu pictures is displayed.
	Press any button on the
	Remote Commander to stop the
	function.
White:	
For Language	The SELECT LANGUAGE screen

# **Advanced Presetting Functions**

### **Exchanging Programme Positions**

You can exchange the programme positions to a preferred order (example: exchange programme 09 (channel C21) with programme 15 (channel C24)).

1 Press MENU 7. The MENU screen appears.



**2** Press the yellow button 17. The PRESET screen appears.

**3** Press the yellow button 17. The PROGR EXCHANGE screen appears.



- 4 Press the white button 17 repeatedly until the desired programme number (09) appears.
- **5** Press the red or the green button 17 repeatedly until the desired channel number (C24) appears.
- 6 Press the white button 17 to store. Now the exchange has been completed. Channel C24 is tuned in to programme 09 and channel C21 is tuned in to programme 15.
- 7 Press MENU 7 twice to return to the normal screen.

### **Editing Programme Names**

You can edit the programme names up to five letters.

1 Press MENU 7.
The MENU screen appears.



Press the yellow button 17. The PRESET screen appears.

Press the blue button 17. The EDIT PROGR NAME screen appears. The first character flashes.



4 Press MENU+/- 9 to edit the first letter.
The first letter changes as follows;

 $A \longleftrightarrow B \longleftrightarrow \ldots \longleftrightarrow Z \longleftrightarrow 0 \longleftrightarrow 1 \longleftrightarrow \ldots \longleftrightarrow 9 \longleftrightarrow "-" \text{ (space)}$ 

- $\mathbf{5}$  Press the red button  $\mathbf{17}$  to move to the next letter.
- 6 Repeat steps 4 to 5, until the fifth letter is chosen.
- **7** Press the green button 17. The programme name is stored, and the normal screen appears. To edit another programme name, repeat steps 1 to 7.

#### **Fine Tuning**

You can adjust the receiving condition by the FINE TUNE function.

- 1 Press MENU 7.
  The MENU screen appears.
- **2** Press the yellow button 17. The PRESET screen appears.
- **3** Press the white button 17 again. The FINE TUNE screen appears.



- 4 Press MENU+/- 9 to adjust the receiving condition.
- **5** Press the red button 17 to store the adjustment, or press the green button 17 not to store.

  Then the normal screen appears. If you have pressed the green button, the fine tuned condition is cancelled once you choose another programme.

#### **Tuning in to a Channel Temporarily**

You can tune in to a channel temporarily, even when it has not been preset.

1 Press C 16 on the Remote Commander. The indicaton "C" appears on the screen.

**Note:** (KV-M2541L only) For cable channels, press C **16** twice. The indication "S" appears.

2 Enter a double-digit channel number using the number buttons (e.g. for channel 23, first press 2, then 3).

The channel appears. However, the channel is not stored.

### **Teletext Operation**

TV stations broadcast teletext programmes via the TV channels. For basic operation of teletext, use the simple side of the Remote Commander. For the advanced features of teletext, use the buttons indicated in green on the full function side of the Remote Commander.

### **Basic Teletext Operation**

Switching Teletext on and off

1 Select the channel which carries the teletext service you wish to view.

2 Press ■ 11 to display Teletext.

If no teletext signal is broadcast, the indication P100 is displayed on a black screen.

Input three digits for the page number using the number buttons 4.

The numbers are displayed on the screen and the requested page appears in a few seconds.

Note: If you make a mistake, type in any three digits, then re-enter the correct page number.

⚠ Press ○ ③ to return to the TV mode.

**Note**: To change the teletext channels. First press  $\bigcirc$  **3** to return to the TV mode, then repeat steps 1 to 3. **Note:** If the signal of a TV channel is weak, teletext errors

may occur.

### Advanced Teletext Operation

Using Fastext

With Fastext you can access pages with one button press. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons 6 on the Remote Commander.

Press the corresponding colour button **6** on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed in a few seconds.

Requesting the Index page

Press 17. The Index page appears.

Accessing the next or preceding page

Press (PAGE +) or (PAGE -) (18). The next or the preceding page appears on the screen.

Superimposing the teletext display on the TV picture

Press (a) 11 once if you are in text mode or press (b) 11 twice if in TV mode.

To return to the normal teletext display press 🗐 🔟 again.



Preventing a teletext page from being updated or changed

Press (HOLD) 2. The HOLD symbol (1) appears on the screen and the selected subpage is held until you press (1) to cancel.

Enlarging the teletext display

Press (\*) 13 once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.

World wedner of the same of th

| Prior TCST TO Town 10 of 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 | 1975 54 |

Revealing concealed information (e.g. answers to a quiz)
Press ② (REVEAL) 4. The information is revealed. Press
② 4 again to conceal the information.

Watching TV while waiting for a requested page to be displayed

1 Request a new teletext page.

**7** Press ⊠(TEXT CL) 12.

• The TV programme is displayed and the symbol is displayed at the top of the page.

**Note:** When the requested page is available the page number is displayed at the top of the screen.

Press ☐ 11 to view the page.

Note: To cancel the request

Using the Favourite Page system

You can store up to four of your favourite teletext pages per programme with the help of the Favourite page system. In this way you have quick access to the pages you watch frequently.

#### Storing the Favourite Pages

- 1 Select the page you would like to store using the number buttons 4.
- Press ↔ 15 twice.
  The colour prompts at the bottom of the screen flash.
- Press any of the colour buttons 6 on the Remote Commander to store the selected page.

  The page is now stored on this button.

Repeat steps 1 to 3 for the other 3 pages available.

Displaying the Favourite pages

**1** Press ↔ 15.

Press the colour button 6 corresponding to the colour prompt onto which the desired page is stored. The page is requested. (It may take a few seconds to be

received).

**Note:** Step 1 must be taken before every favourite page selection, otherwise the normal Fastext facility operates.

Using the Time Function in the TV mode

Press ② 12 to request the time. Press again to cancel the request.

**Note:** This function is available only when teletext is broadcast.

### **Connecting Other Equipment**

You can connect optional audio/video equipment to this TV such as VCRs, video disc players, cameras or stereo systems.

Connector	Acceptable input signal	Available output signal
- <b>◌◌̃1 L</b> (AV1/RGB)	Audio/video and RGB signal	Audio/video signal from TV Tuner
<b>-2</b> / <b>-2 GH</b> (AV2)	Audio/video signal	No outputs
<b>-€)2/-€92 G</b> [] (YC2)	Audio/S video signal	No outputs

To watch a video input picture, press ② until the desired video input appears.

To return to the normal TV picture, press ② 2 repeatedly or press ③ 3.

**Note:** If you have a decoder, connect it to **☼1** ...

# Connecting a VCR Using the TV Aerial Terminal

Connect the aerial output of the VCR to the aerial terminal of the TV. It is recommended to tune in the VCR signal to programme number "0". For details, see "Tuning in to Channels Manually" on page 6.

Note: S video input (Y/C input) \( \bar{\text{L}} \) Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.

Separating the Y and C signals prevents them from interfering with each other and therefore improves the picture quality (especially luminance). This TV is equipped with 1 video input terminal through which these signals can be input directly.

# Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8mm or VHS VCRs or video disc players.

# **Tuning the Remote Commander to the equipment**

1 Set the VTR 1/2/3 MDP selector 20 according to the equipment you want to control:

VTR 1: Beta VCR VTR 2: 8mm VCR VTR 3: VHS VCR MDP: Video Disc Player

2 Use the buttons 21 to operate the additional equipment.

**Note:** If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.

**Note:** If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate

**Note:** When you use the • (record) button, make sure to press this button and the one to the right of it simultaneously.

### **Using Headphones**

You can utilise headphones. Connect them to the headphone jack  $\boxed{J}$ , then the sound from the speaker goes off.

# For your information

### **Troubleshooting**

Here are some simple solutions to problems which may affect the picture and sound.

### No picture (screen is dark), no sound

- Plug the <u>TV</u> in.
- Prug the TV in.
  Press ① A on the TV. (If the standby indicator B is lit, press 3 or any number button 4 on the Remote Commander.)
- Check if the selected video source is on.
- Turn the TV off for three or four seconds and then turn it on again using ① A.

### Poor or no picture (screen is dark), but good sound

• Press MENU 7 to enter the MENU screen, and press the red button **17**, then adjust **0** and **9**.

# Good picture but no sound • Press ✓+ 19.

- If  $\$ is displayed on the screen, press  $\$  $\$  $\$  $\$ 1.

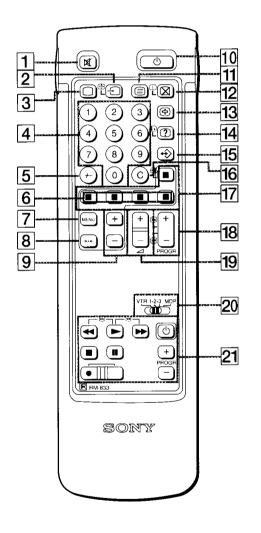
No colour for colour programmes

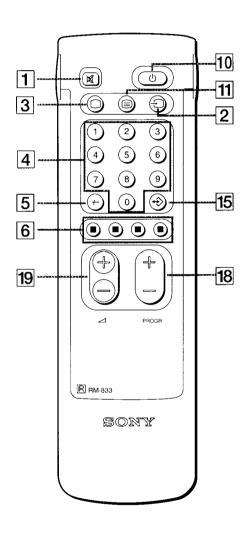
• Press MENU 7 to enter the MENU screen, and press the red button 17, then adjust 3.

### Remote Commander does not function

• Replace the battery.

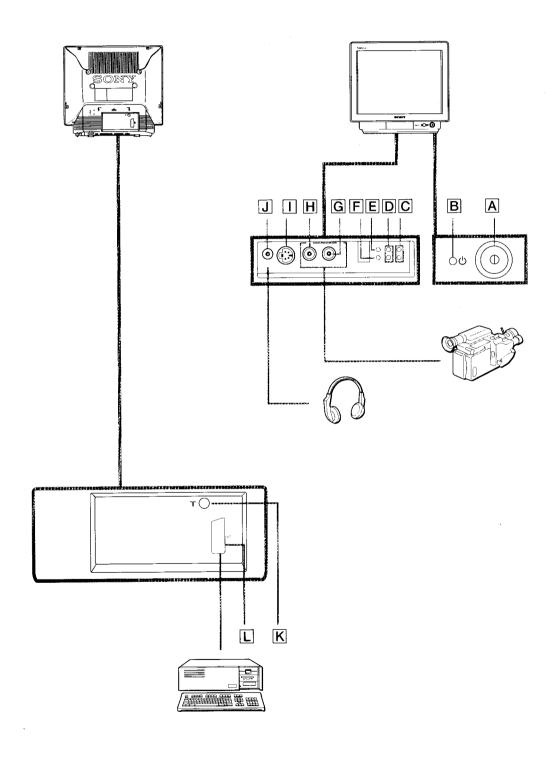
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.





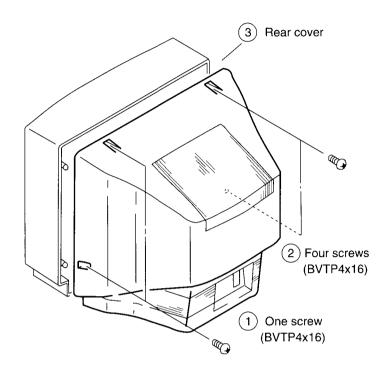
Full-Function Side

Simple Side

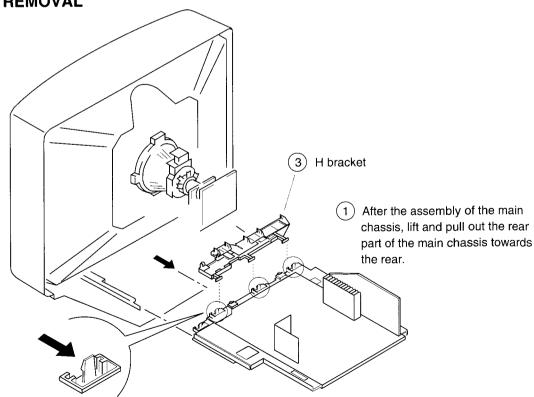


# SECTION 2 DISASSEMBLY

### 2-1. REAR COVER REMOVAL

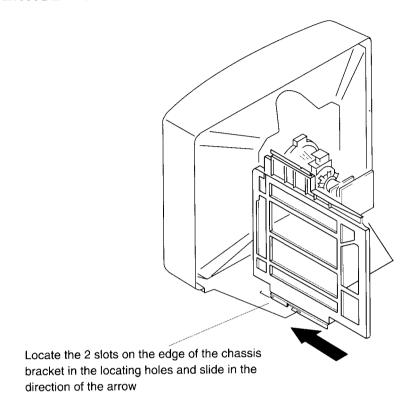


### 2-2. CHASSIS ASSY REMOVAL



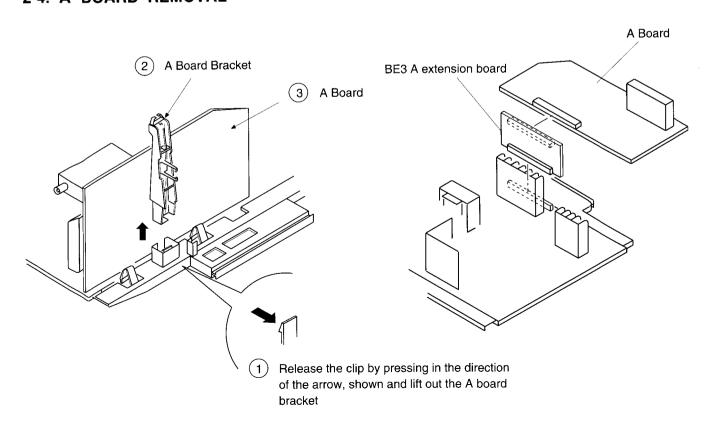
2 Push the three claws of the main chassis in the direction of the arrow and remove the H bracket upwards.

# 2-3. SERVICE POSITION

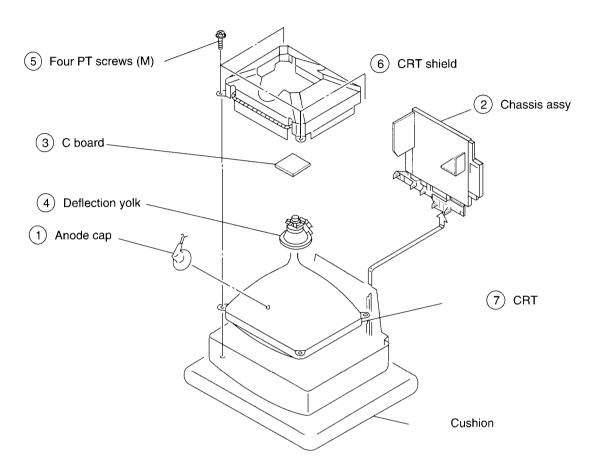


# 2-4. A BOARD REMOVAL

### 2-5. EXTENSION BOARD



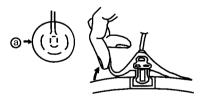
### 2-6. PICTURE TUBE REMOVAL



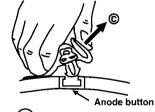
### REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

### \* REMOVING PROCEDURES.



- Turn up one side of the rubber cap in the direction indicated by the arrow (a)
- - 2 Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow (b)



When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow (C)

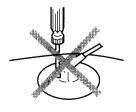
#### • HOW TO HANDLE AN ANODE-CAP

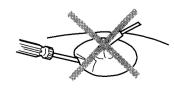
- ① Don't damage the surface of anode-cap with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!

A metal fitting called as shatter-hook terminal is built into the rubber.

(3) Don't turn the foot of rubber over hardly!

The shatter-hook terminal will stick out or damage the rubber.





# SECTION 3 SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings:

Contrast	80	0% (or remote conti	rol
	no	ormal)	
A Brightness	50	)%	

- Carry out the following adjustments in this order:
- 1. Beam landing
- 2. Convergence
- 3. Focus
- 4. White balance

Note: Testing equipment required.

- 1. Color bar/pattern generator
- 2. Degausser
- 3. DC power supply
- 4. Digital multimeter
- 5. Oscilloscope

#### **Preparation:**

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

### 3-1. BEAM LANDING

- Input the white signal with the pattern generator.
   CONTRAST BRIGHTNESS normal
- 2. Position neck assy as shown in Fig.3-2.
- 3. Set the pattern generator raster signal to red.
- 4. Move the deflection yoke forward and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 3-3)
- 5. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
- 6. Switch the raster signal to blue, then to green and verify the condition.
- 7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
- 8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

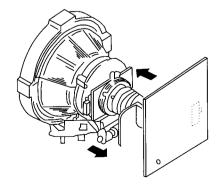


Fig. 3-1

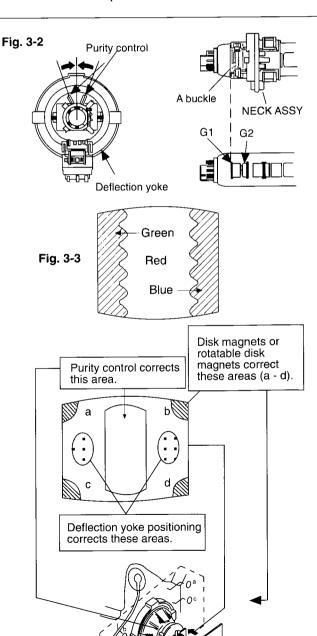


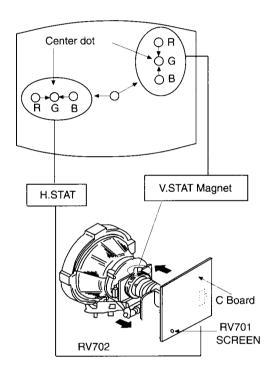
Fig. 3-4

### 3-2. CONVERGENCE

### Preparation:

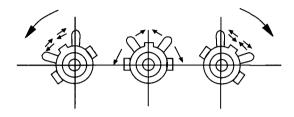
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

### (1) Horizontal and vertical static convergence

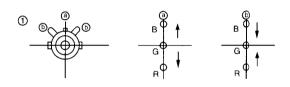


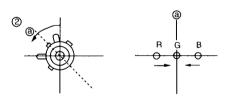
- 1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
- 2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
- If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

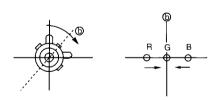
• Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

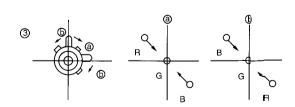


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.

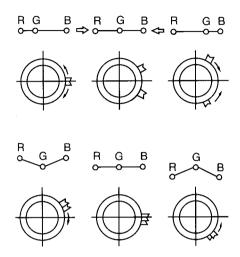




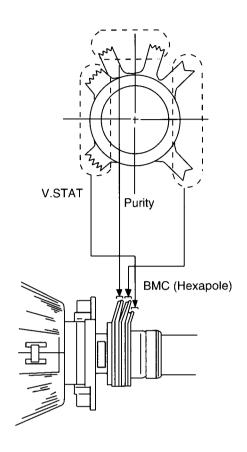




Operation of BMC (Hexapole) Magnet



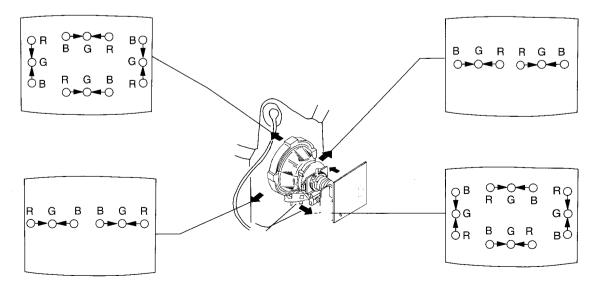
 The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
 Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of the screen (by moving the dots in the horizontal direction).



### (2) Dynamic convergence adjustment.

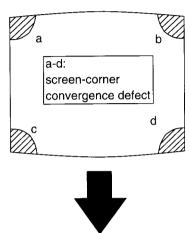
### Preparation:

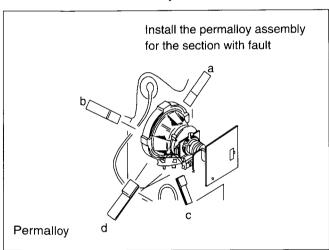
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.
- 1. Slightly loosen the deflection yoke screws.
- 2. Remove the deflection yoke spacer.
- 3. Move the deflection yoke as shown in the figure below and optimize the convergence.
- 4. Tighten the deflection yoke screws.
- 5. Re-install the deflection yoke spacer.



### (4) Screen corner convergence.

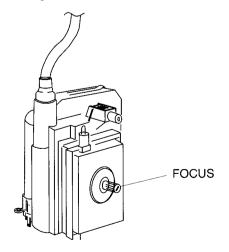
If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.





### 3-3. Focus

Adjust the focus to optimize the screen.



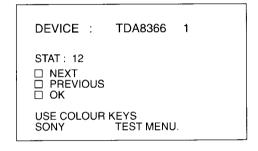
### 3-4. WHITE BALANCE

### Screen G2 Setting

- 1. Input the dot signal from the pattern generator.
- 2. Set the picture brightness control to its lowest level.
- 3. Apply 180V DC to the R,G, and B cathodes with an external power supply.
- 4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

### White balance adjustment

- 1. Receive an all-white signal.
- Enter into service mode. (Refer to the section 4
  "Electrical Adjustment" on how to enter service
  mode.)
- 3. Select TDA8366 1 on menu.



- 4. Press the White button on the Remote Commander to enter into the device Menu.
- 5. Press the Red button 10 times "Next" "Next" "Next" to select HWB RED, adjust to 040.
- Press the Red button to select HWB GREEN, adjust with the + and - menu buttons so that the white balance becomes optimum.
- 7. Press the Red button to select HWB BLUE, adjust with the + and menu buttons so that the white balance becomes optimum.
- 8. Press the TV button twice on the Remote Commander to store the data and return to TV operation.

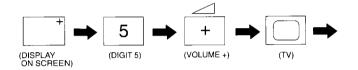
# SECTION 4 CIRCUIT ADJUSTMENTS

### 4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-833.

### HOW TO ENTER INTO SERVICE MODE

- 1. Turn on the main power switch of the set and enter into standby mode.
- 2. Press the following sequence of buttons on the Remote Commander.

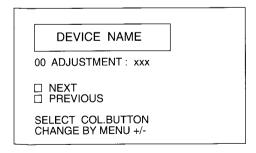


"TT" will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.

DEVICE NAME
STAT: xxxx
□ NEXT □ PREVIOUS □ OK
USE COLOUR KEYS SONY TEST MENU.

4. Press the Red (Next) and Green (Previous) buttons to select the device corresponding to the adjustment item from the table. Then press the White button (OK).



- 5. Press the Red (Next) or Green (previous) buttons to select the adjustment item. Then press the and buttons to change the data to comply with each standard.
- 6. Turn off the power to quit the service mode when adjustments are completed.

Initial Conditions for setup of TDA8366, and TDA6622

TDA8366 1	INIT VALUE	TDA8366 2	INIT VALUE
Hue	31	Interlace	00
H Shift	Adj	Sync Mode	00
H Size	Adj	Col Dec	00
Pin Amp	Adj	Vert Div	00
Corn Pin	Adj	Vid ID	00
Tilt	Adj	EHT Track	01
V.Linear	Adj	En V Grd	00
V.Size	Adj	Serv Blk	00
S.Corr	Adj	OVP Mode	00
V.Cent	Adj	Aspect R	00
HWB Red	Adj	Start Freq	00
HWB Green	Adj	Y/C Input	00
HWB Blue	Adj	PAL/NTSC	00
Peaking	8	Xtal PLL	00
Bright	32	Y Delay	07
Colour	32	RGB Blk	00
Picture	37	Noise Cor	00
AGC Set	00	Fast Blk	01
Srce Sel 1	00	AFC Wind	00
Srce Sel 2	00	IF Sensty	00
Time Con	03	Mod Std	00
Xtal Ind	03	Vid Mute	01
FF Freq	02		

TDA6622	INIT VALUE	TDA6622	INIT VALUE
MPX Per	00	Mute 2	01
Quasi St	00	C1/2LS	00
Bass Exp	00	C1/2KH	00
H Pulse	00	Mono	01
Matrix St	00	Scart	00
Bypass	00	Scart D	00
Vol L Sp	31	AM	00
Vol R Sp	31		
Vol HP	00	1	
PII Sync	00	1	
Mute 3	01	1	
Treble	07	1	
Bass	15	1	
X Talk Adj		1	
Mute 1	00	1	

### 4-2. TEST MODE 2:

Is available by pressing Test button twice, OSD 'TT' appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press 0 twice, or switch the TV into Stand-by Mode.

00	switch Test Mode 2 off
01	picture maximum
02	picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Ageing Condition (Volume min., Picture max., Brightness max.
08	Shipping Condition (Analog Values are RESET due to factory setting, Prog 1 is selected, TT Mode is switched off)
09	"Menu" Flag request
10	Tenth entry is deleted
11	dummy
12	dummy
13	dummy
14	Forced AV 16:9 detection on/off
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM.
17	Preset Label for AV Sources
18	RGB Priority on/off
19	Clear all preset labels
20	Tenth entry is deleted
21	Sub Contrast
22	Sub Colour
23	Sub Brightness
24	Set destination = U RGB Priority = Off
25	Set destination = D RGB Priority = Off
26	Set destination = B RGB Priority = On
27	Set destination = K RGB Priority = Off
28	Set destination = L RGB Priority = Off
29	Set destination = E RGB Priority = Off

30	Tenth entry is deleted
31	Set Destination = A RGB Priority = On
	, , , , , , , , , , , , , , , , , , ,
32	dummy
33	Auto AGC
34	N/S Pin Adjust
35	Manual AGC Adjust
36	dummy
37	dummy
38	dummy
39	dummy
40	Tenth entry is deleted
41	Re-initialise NVM
42	Production use only
43	Initialise Geom Settings
44	Initialise all favorite pages = 100
45	Channel locks = off
46	IR Channel Pressetting Mode The channel pressetting can be done by a Special IR Transmitter ( Ver 2 and above software only)
47	dummy
48	Set NVM testbyte to 44h
49	Erase the NVM Testbyte (this byte detects already stored NVM's) After selecting this function, switch TV Off and On -> the NVM will be preset by $\mu$ -Controller.

In Test Mode the Menu display is switchable by the Speaker-Off button.

**Note**: For Test Modes 41 - 49 it is necessary to ensure that the TV is set to Prog 59.

### SUB BRIGHTNESS ADJUSTMENT

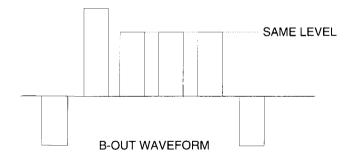
- 1. Input a Phillips pattern.
- 2. Enter into service mode and press 23.
- 3. Adjust data so that 0-IRE of grey scale and CUT-OFF 20-IRE are only slightly visible on screen.

### SUB CONTRAST ADJUSTMENT

- 1. Input a video that contains a small 100% area on a Black Background.
- 2. Enter into service mode and press 01 to have PIC max followed by 21.
- 3. Connect oscilloscope to pin ① of CN703 (R OUT) and adjust HWB Red data of TDA8366 1 to obtain 2.3Vp-p.

### SUB COLOR ADJUSTMENT

- 1. Input a PAL color bar signal.
- Connect an oscilloscope to pin (3) of CN703 (B OUT) on the C board.
- 3. Enter into service mode and press 22.
- 4. Adjust data so that the right sides of the waveform are set to the same level.



# I.F. COIL ADJUSTMENT (T101) - B/G, D/K, I AND L STANDARD FOR CONTINENTAL MODELS.

- 1. Apply a 38.9MHz signal at 100dBuV to the input of SWF101.
- Receive a channel so that the I.C. is selected for negative modulation.
- 3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

# I.F. COIL ADJUSTMENT (T101) - I, STANDARD FOR U.K. MODELS.

- Apply a 39.5MHz signal at 100dBuV to the input of SWF101.
- Receive a channel so that the I.C. is selected for negative modulation.
- 3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

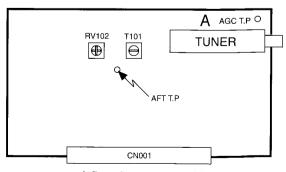
# L, BAND 1 ADJUSTMENT (RV102) - L, STANDARD FOR FRENCH MODELS.

- Apply a 33.95MHz signal at 100dBuV to the input of SWF101.
- 2. Receive a channel so that the I.C. is selected for positive modulation and system L band 1.
- 3. Measure the voltage at the AFT test point and adjust (RV102) to obtain 2.4V +/- 0.2V.

**Note**: Only adjust RV102 after T101 has been correctly adjusted.

### AGC ADJUSTMENT

- 1. Receive an off- air signal.
- 2. Enter the service mode, ("Test" "Test") and 35.
- 3. Adjust the data so that there is no snow or cross modulation visible on the screen.
- 4. Change the receiving off-air channel, and confirm the above status.



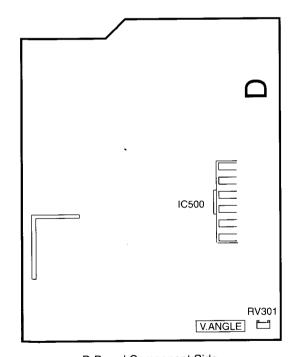
- A Board component side -

# DEFLECTION SYSTEM ADJUSTMENT

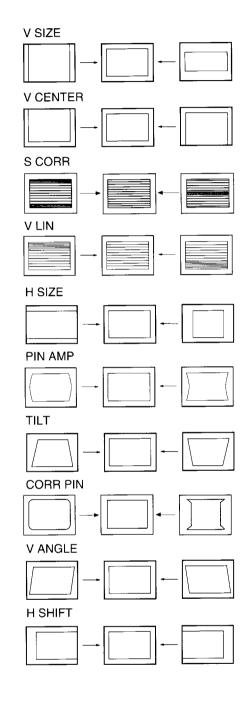
- 1. Enter into service mode.
- 2. Select and adjust each item in order to obtain the optimum image.

Item No	Adjustment item.	Data Amount
03	H SHIFT	ADJ.
Ó4	H SIZE	_ ADJ
05	PIN AMP	ADJ.
06	CORR PIN	ADJ.
07	TILT	ADJ.
08	V LINEAR	ADJ.
09	V SIZE	ADJ.
0A	S CORR	ADJ.
0B	V CENTER	ADJ.

Note : V ANGLE is adjusted by a Variable Resistor on the 'D' Board (RV301)



- D Board Component Side -



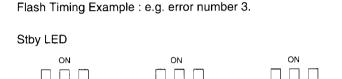
# 4-3. BE3 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3 chassis is triggered in 1 of 2 ways:-1: Bus busy or 2: Device failiure to respond to IIC. In the event of one of these situations arrising the software will first try to release the bus if busy (Failiure to do so will report with continous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1., on fatal errors are reported with this method.

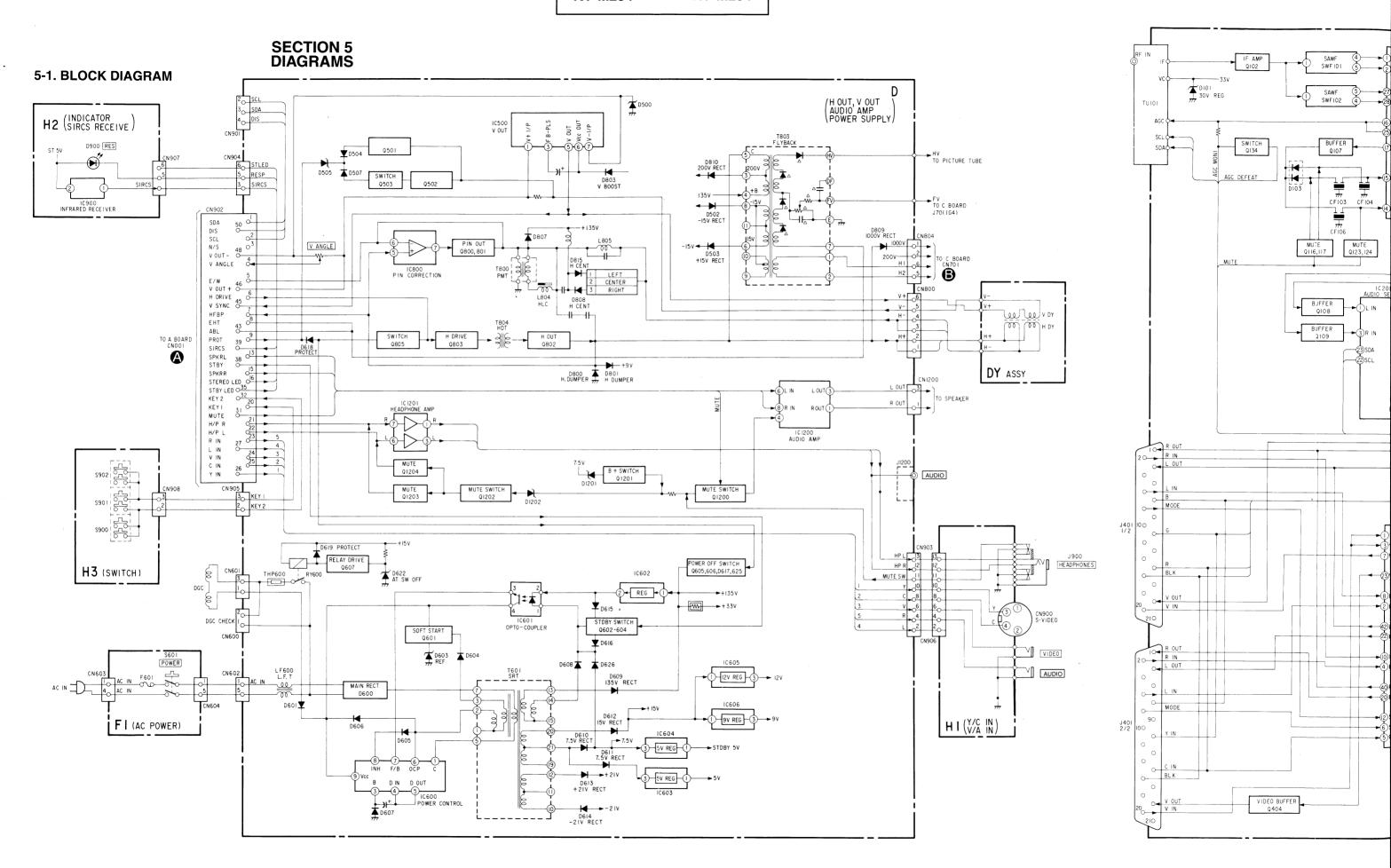
If a fatal error is found the set will simply stay in whichever state it was when the error occured, but if a non fatal error occurs the set will try to continue operation.

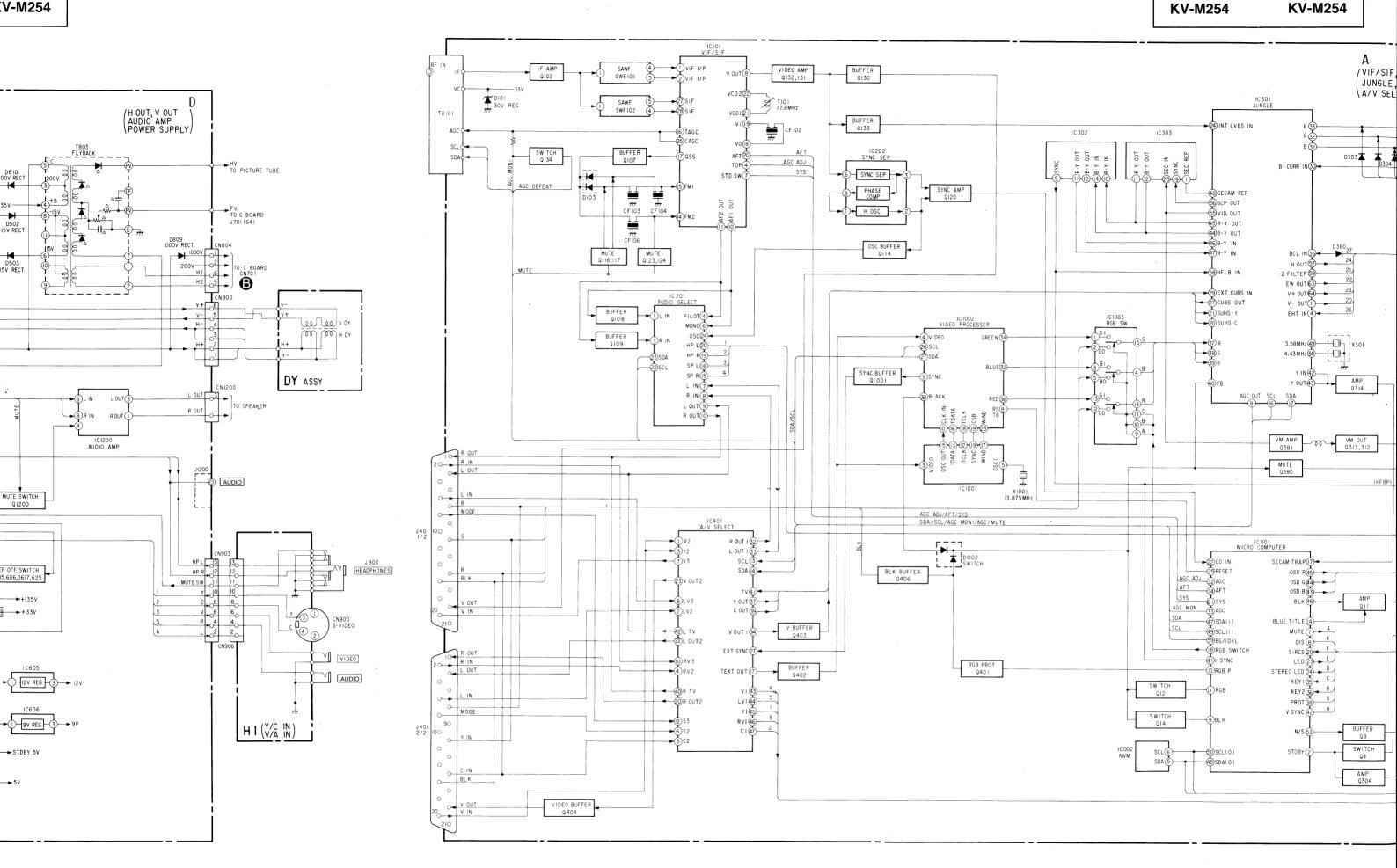
Table 1

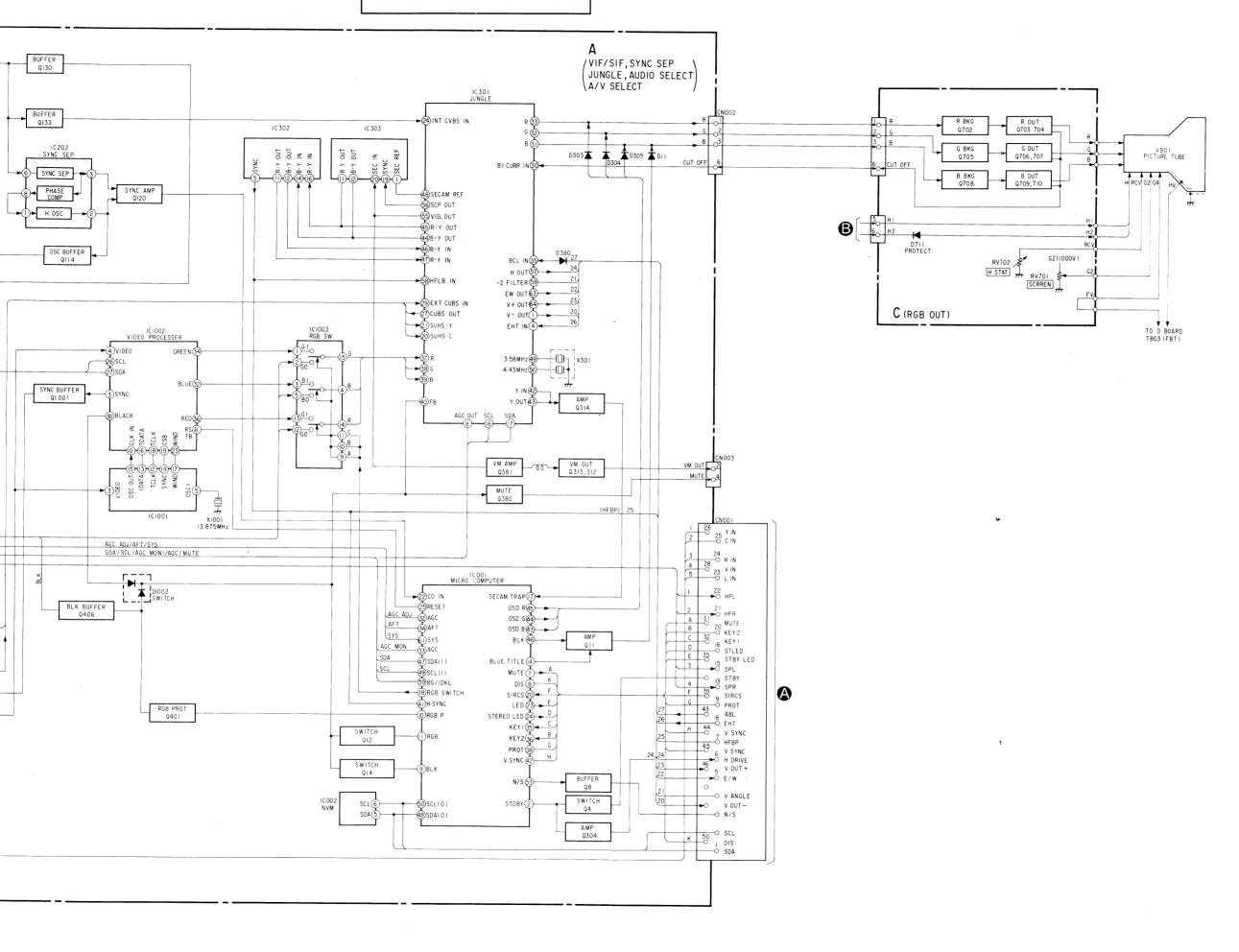
Device	LED Error Count	Fatal Error	
NVM	29	1	
Teletext	10		
Jungle	11	1	
Video_sw	12		
Tuner	13	1	
Nicam	14		
Audio_cont	15	V	



MEMO								
					-			
	_							
								<del></del>
			_					
				ALC: NO		·		
				<u> </u>			<u>-</u>	
	<u></u> .						<u>.</u>	
						•		
	<del></del>							
		. <u>-</u>			<u></u>			
							<del></del>	
					_	***		-
						948		
•							-	
				<del></del>				
					,			
-								
			-		-			







Α

В

C

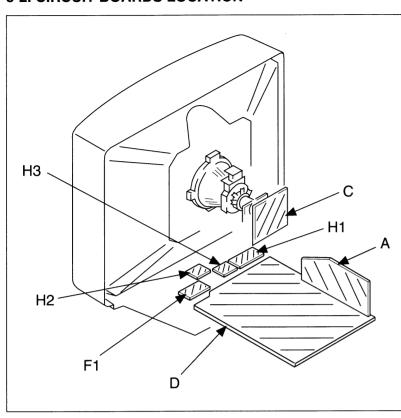
D

G

Н

3

### 5-2. CIRCUIT BOARDS LOCATION



#### 5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- · All capacitors are in µ F unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytic.
- · Indication of resistance, which dose not have one for rating electrical power, is as follows.

Rating electrical power: 1/4W

- Chip resistor is in 1/10W.
- · All resistors are in ohms. k Ω = 1000 Ω, M Ω = 1000 K Ω
- Two : nonflammable resistor.
- · fusible resistor.
- : internal component.
- panel designation or adjustment for repair.
- · All variable and adjustable resistors have charactristic curve B, unless otherwise noted.
- · All voltages are in V.
- Readings are taken with a 10M  $\Omega$  digital multimeter.
- · Readings are taken with a color-bar signal input.
- · Voltage variations may be noted due to normal production tolerances.
- . : B + bus.
- = : B bus.
- signal path.(RF)
- \_\_ : earth ground
- · : earth chassis

Reference information

COIL

RESISTOR : METAL FILM RN : SOLID

: NONFLAMMABLE CARBON **FPRD** : NONFLAMMABLE FUSIBLE FUSE RS : NONFLAMMABLE METAL OXIDE : NONFLAMMABLE CEMENT RB : NONFLAMMABLE WIREWOUND RW : ADJUSTMENT RESISTOR LF-8L : MICRO INDUCTOR

CAPACITOR TA : TANTALUM : STYROL : POLYPROPYLENE PP

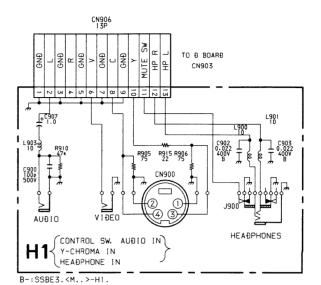
> : MYLAR MPS : METALIZED POLYESTER MPP : METALIZED POLYPROPYLENE

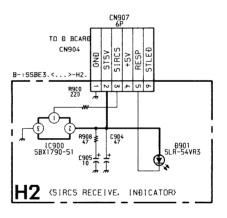
ALB : BIPOLAR

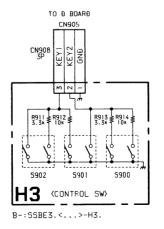
ALT : HIGH TEMPERATURE : HIGH RIPPLE ALR

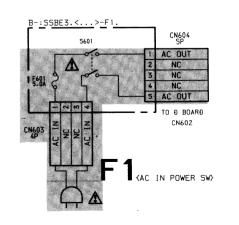
Note: The components identified by shading and mark A are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et par une marque / sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.











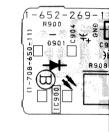
6







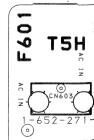
- H2 BOARD

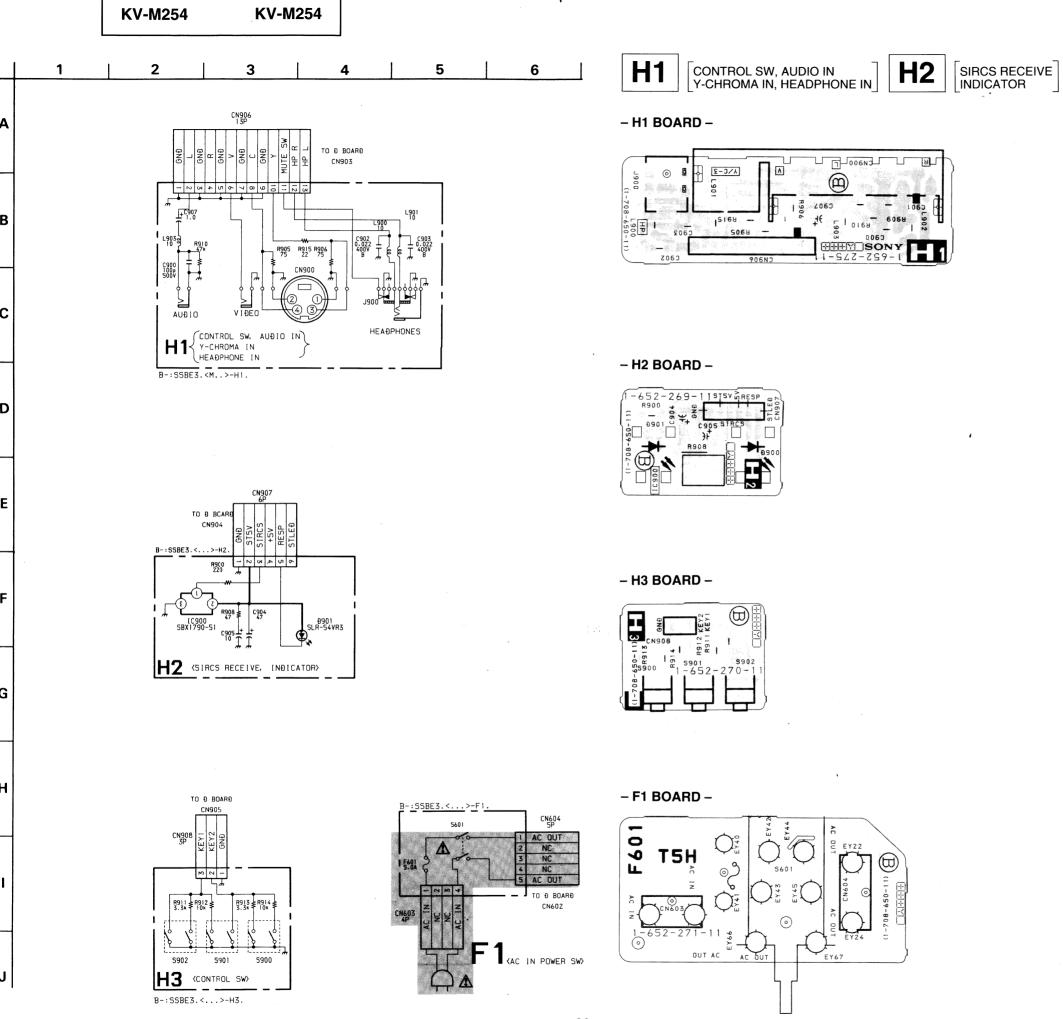


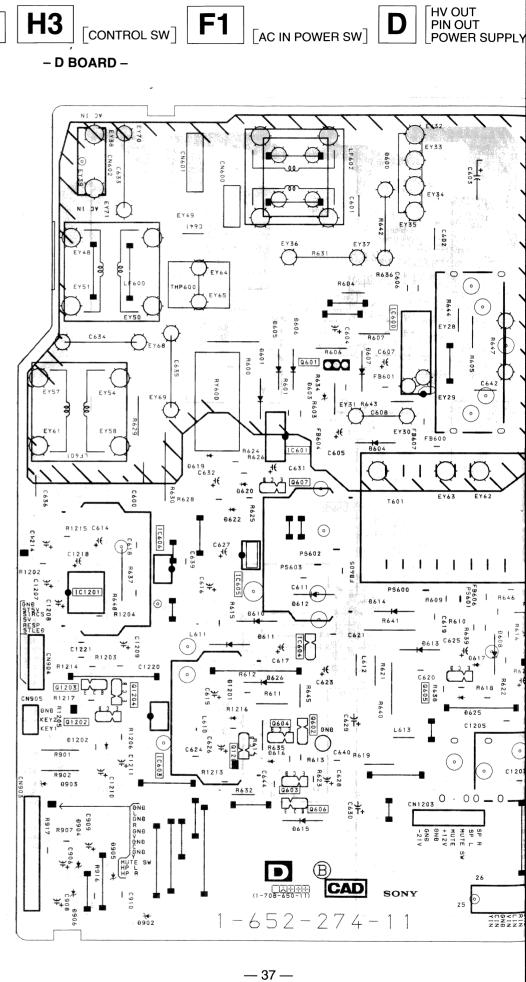
### - H3 BOARD



- F1 BOARD







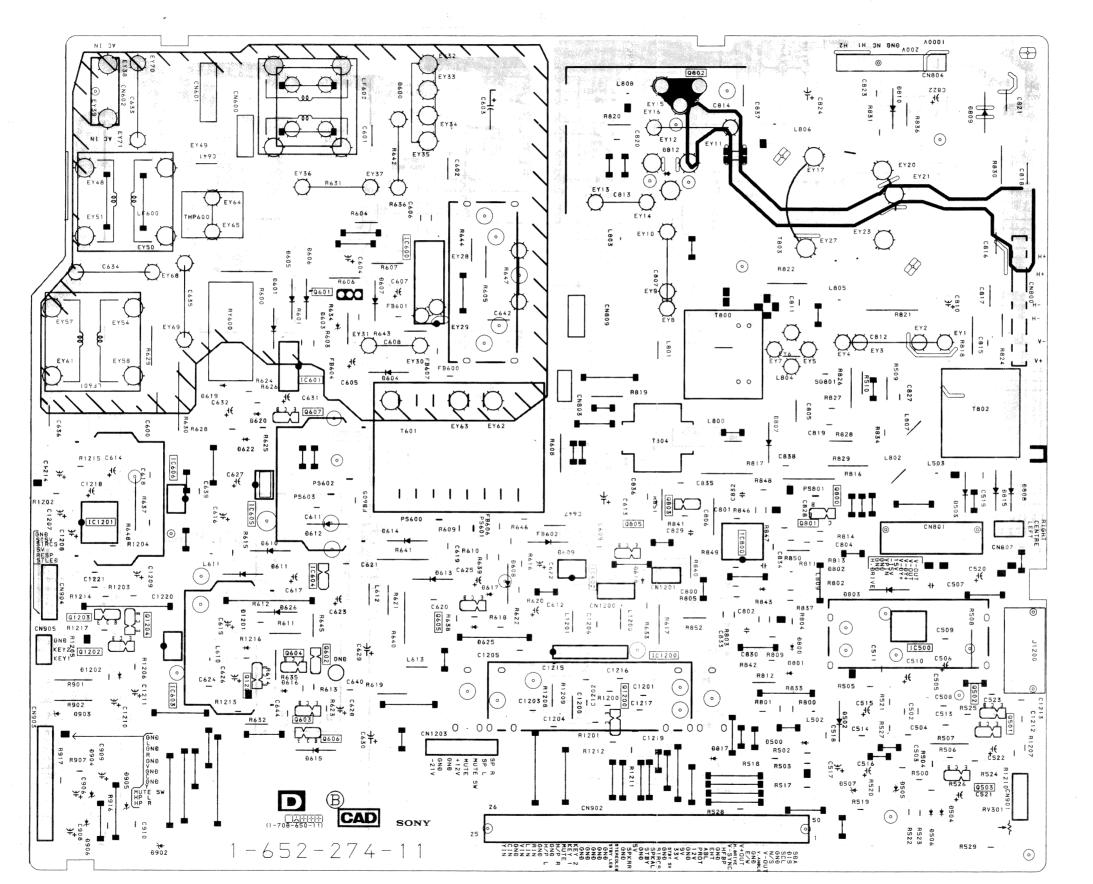
SIRCS RECEIVE INDICATOR

[CONTROL SW] **F1** 

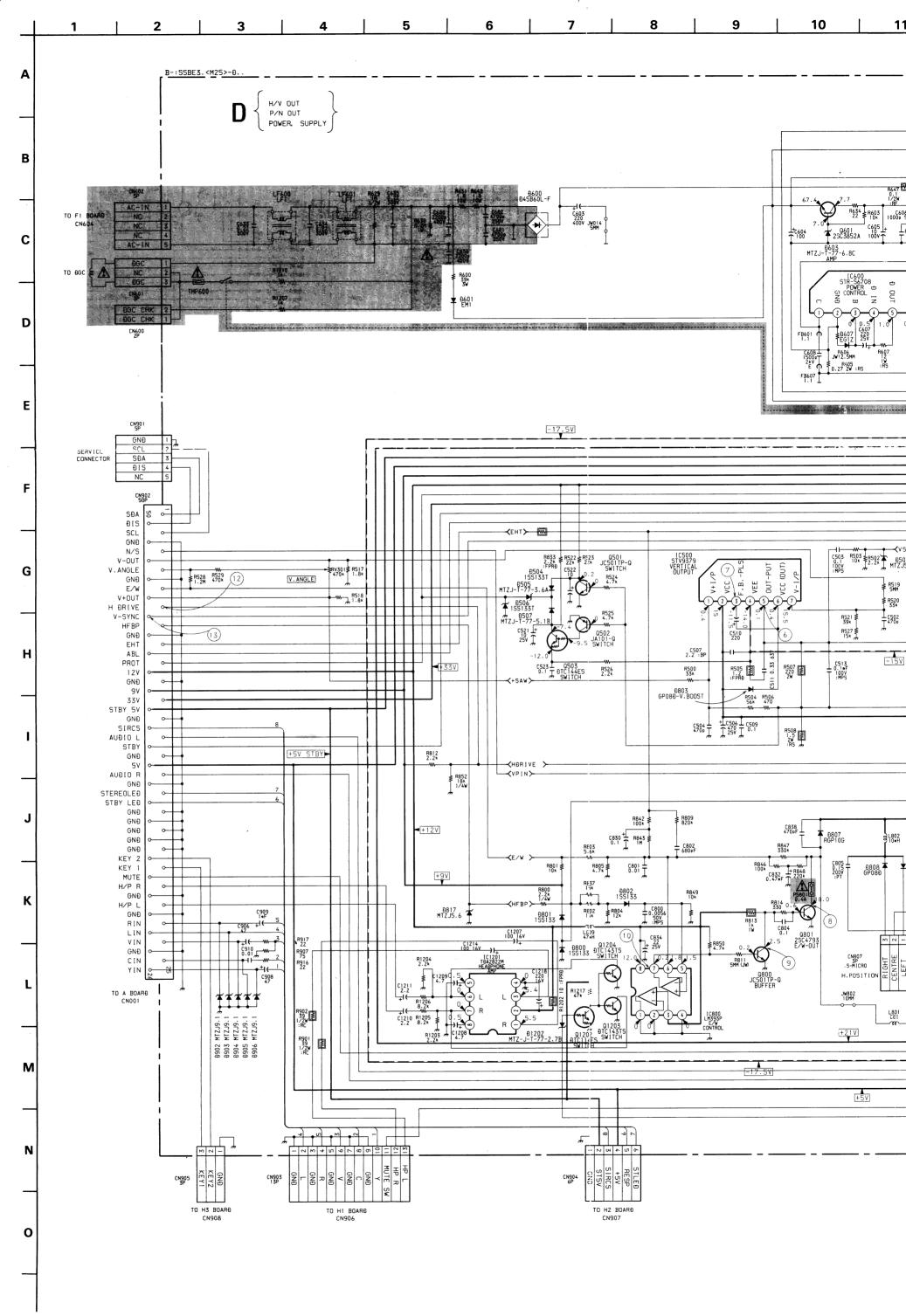
[AC IN POWER SW]

HV OUT
PIN OUT
POWER SUPPLY

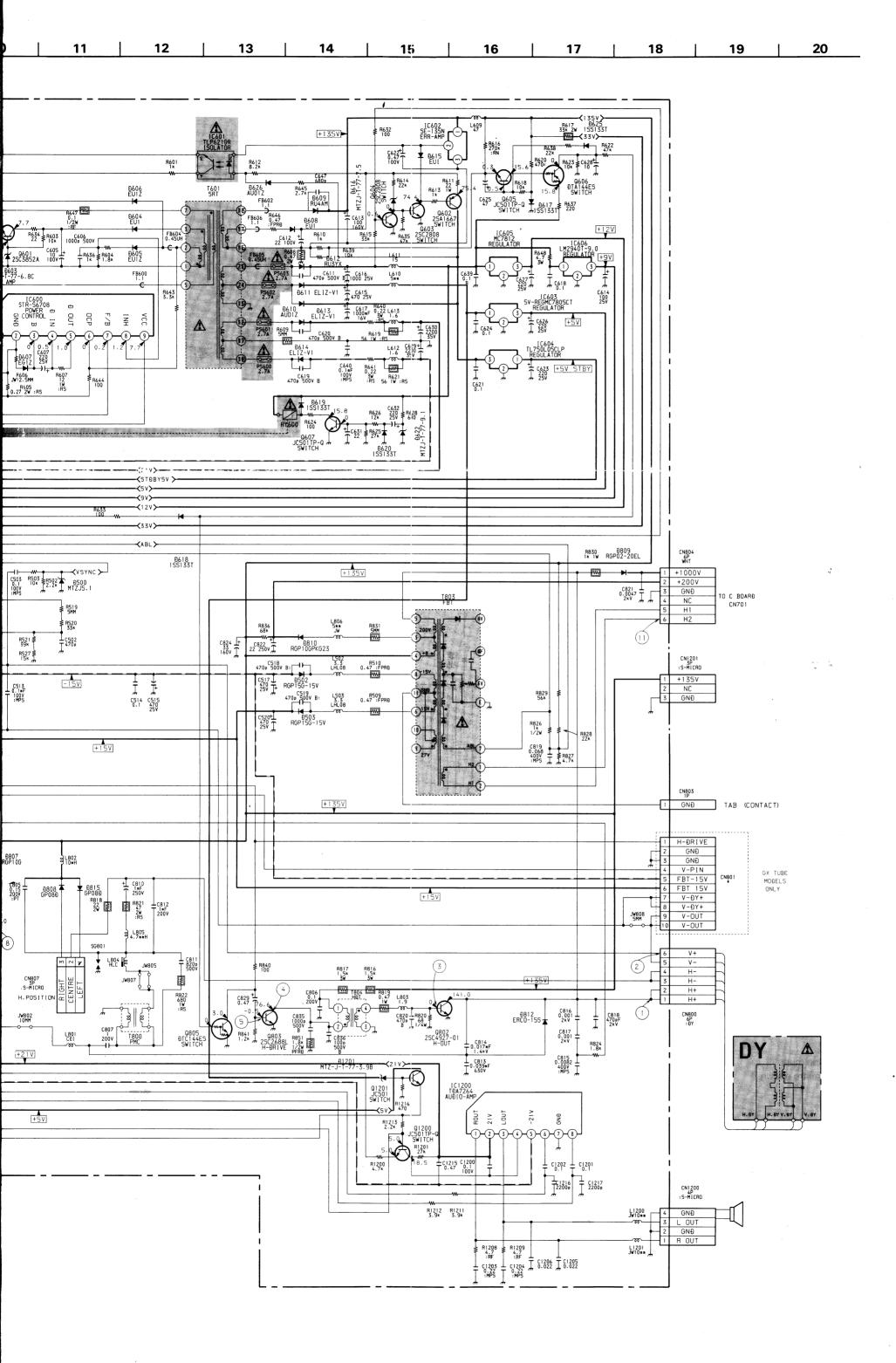
- D BOARD -



IC500   G - 10   D601   C - 3   D600   D - 4   D600   D - 4   D605   C - 3   D603   D - 4   D605   C - 3   D603   D - 4   D605   C - 3   D603   D - 4   D605   C - 3   D606   C - 4   D605   C - 4   D605   C - 4   D605   C - 4   D606   C - 4   D606   C - 4   D606   F - 6   D607   C - 4   D606   F - 6   D607   C - 4   D606   F - 6   D600   F - 3   D600   F - 6   D611   F - 3   D611   F - 3   D612   F - 4   D613   F - 5   D612   F - 4   D613   F - 5   D614   F - 4   D615   H - 4   D615   D615   D620   E - 3   D620   D600   G - 9   D800   F - 9   D800   F - 9   D800   D800	IC		D600	A - 4
IC600   C - 5   D603   D - 4     IC601   D - 4   D605   C - 3     IC602   F - 7   D606   C - 4     IC603   H - 2   D607   C - 4     IC604   F - 4   D608   F - 6     IC605   F - 3   D609   F - 6     IC606   E - 2   D610   F - 3     IC606   E - 2   D610   F - 3     IC800   F - 8   D611   F - 3     IC1200   G - 7   D612   F - 4     IC1201   F - 1   D613   F - 5    TRANSISTOR   D614   F - 4     D615   H - 4     D607   D615   H - 4     D609   F - 6     D610   F - 3     D609   F - 6     D600   F - 9     D601   F - 3     D601   F - 3     D602   F - 4     D610   F - 3     D604   F - 4     D605   F - 7     D605   F - 7     D605   F - 7     D806   F - 7     D807   F - 9     D808   F - 7     D809   A - 11     D800   B - 9     D801   F - 9     D802   F - 9     D803   F - 10     D904   H - 1     D505   I - 10     D905   I - 10     D906   I - 11	10500	G - 10	D601	C - 3
IC601			D603	D - 4
IC602			D604	D - 4
IC603			D605	
IC604			D606	
IC605			D607	
IC606			D608	F-6
IC800	1		D609	F - 6
IC1200   G - 7   IC1201   F - 1   D612   F - 4   D613   F - 5   D614   F - 4   D615   H - 4   D615   H - 4   D615   H - 4   D616   G - 3   D617   F - 5   D616   G - 3   D617   F - 5   D616   G - 3   D620   G - 4   D619   D - 2   D603   H - 3   D622   E - 3   D625   G - 5   D626   G - 3   D625   G - 9   D800   G - 9   D800   G - 9   D800   G - 9   D800   F - 9   D803   F - 9   D804   F - 9   D805   F - 7   D808   E - 11   D805   F - 7   D809   A - 11   D810   A - 10   D812   B - 7   D803   F - 10   D904   H - 1   D504   I - 10   D904   H - 1   D505   I - 10   D905   H - 2   D506   I - 10   D906   I - 1	1		D610	
IC1201   F - 1   D612   F - 4			D611	
TRANSISTOR    D613	l		D612	
TRANSISTOR         D615         H - 4           Q501         H - 11         D616         G - 3           Q502         H - 11         D617         F - 5           Q503         I - 11         D618         F - 7           Q601         C - 4         D619         D - 2           Q602         G - 4         D620         E - 3           Q603         H - 3         D622         E - 3           Q604         G - 3         D625         G - 5           Q605         G - 5         D626         G - 3           Q606         H - 4         D800         G - 9           Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D502         G - 9         D902         I - 2           D503         F - 10         D903         H - 1	101201		D613	
Q501       H - 11       D615       H - 4         Q502       H - 11       D616       G - 3         Q503       I - 11       D618       F - 7         Q601       C - 4       D619       D - 2         Q602       G - 4       D620       E - 3         Q603       H - 3       D622       E - 3         Q604       G - 3       D625       G - 5         Q605       G - 5       D626       G - 3         Q606       H - 4       D800       G - 9         Q800       E - 9       D802       F - 9         Q801       F - 9       D803       F - 9         Q802       A - 8       D807       E - 9         Q803       F - 7       D808       E - 11         Q805       F - 7       D809       A - 11         Q1200       H - 7       D810       A - 10         D812       B - 7         D815       E - 11         D500       G - 9       D902       I - 2         D503       F - 10       D903       H - 1         D505       I - 10       D905       H - 2         D506       I - 10       D906       I - 1	TRANSISTOR		D614	
Q502         H - 11         D617         F - 5           Q503         I - 11         D618         F - 7           Q601         C - 4         D619         D - 2           Q602         G - 4         D620         E - 3           Q603         H - 3         D622         E - 3           Q604         G - 3         D625         G - 5           Q605         G - 5         D626         G - 3           Q606         H - 4         D800         G - 9           Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D502         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2			D615	
Q503         I - 11         D618         F - 7           Q601         C - 4         D619         D - 2           Q602         G - 4         D620         E - 3           Q603         H - 3         D622         E - 3           Q604         G - 3         D625         G - 5           Q605         G - 5         D626         G - 3           Q606         H - 4         D800         G - 9           Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D812         B - 7           D815         E - 11           D500         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1			D616	
Q601         C - 4         D619         D - 2           Q602         G - 4         D620         E - 3           Q603         H - 3         D622         E - 3           Q604         G - 3         D625         G - 5           Q605         G - 5         D626         G - 3           Q606         H - 4         D800         G - 9           Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D815         E - 11           D500         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D505         I - 10         D904         H - 1           D506         I - 10         D906         I - 1	1		D617	F - 5
Q602         G - 4         D620         E - 3           Q603         H - 3         D622         E - 3           Q604         G - 3         D625         G - 5           Q605         G - 5         D626         G - 3           Q606         H - 4         D800         G - 9           Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D815         E - 11           D500         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1	·		D618	F - 7
Q603         H - 3         D622         E - 3           Q604         G - 3         D625         G - 5           Q605         G - 5         D626         G - 3           Q606         H - 4         D800         G - 9           Q800         E - 9         D801         G - 9           Q801         F - 9         D802         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D812         B - 7           D812         B - 7           D815         E - 11           D500         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1	I		D619	
Q604         G - 3         D625         G - 5           Q605         G - 5         D626         G - 3           Q606         H - 4         D800         G - 9           Q607         E - 4         D801         G - 9           Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D812         B - 7           D812         B - 7           D815         E - 11           D500         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D505         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1	l		D620	E - 3
Q605         G - 5         D626         G - 3           Q606         H - 4         D800         G - 9           Q607         E - 4         D801         G - 9           Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D812         B - 7           D812         B - 7           D815         E - 11           D500         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1	I		D622	E - 3
Q606         H - 4         D800         G - 9           Q607         E - 4         D801         G - 9           Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D815         E - 11           D500         G - 9         D817         H - 8           D502         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1	Į.		D625	G - 5
Q607         E - 4         D801         G - 9           Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7         D812         B - 7           D815         E - 11         D815         E - 11           D500         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1	I		D626	
Q800         E - 9         D802         F - 9           Q801         F - 9         D803         F - 9           Q802         A - 8         D807         E - 9           Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7         D815         E - 11           D500         G - 9         D817         H - 8           D502         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1			D800	G - 9
Q801       F - 9       D803       F - 9         Q802       A - 8       D807       E - 9         Q803       F - 7       D808       E - 11         Q805       F - 7       D809       A - 11         Q1200       H - 7       D810       A - 10         D812       B - 7         D812       B - 7         D815       E - 11         D500       G - 9       D817       H - 8         D502       G - 9       D902       I - 2         D503       F - 10       D903       H - 1         D504       I - 10       D904       H - 1         D505       I - 10       D905       H - 2         D506       I - 10       D906       I - 1	ł		D801	G - 9
Q802       A - 8       D807       E - 9         Q803       F - 7       D808       E - 11         Q805       F - 7       D809       A - 11         Q1200       H - 7       D810       A - 10         D812       B - 7         D812       B - 7         D815       E - 11         D500       G - 9       D817       H - 8         D502       G - 9       D902       I - 2         D503       F - 10       D903       H - 1         D504       I - 10       D904       H - 1         D505       I - 10       D905       H - 2         D506       I - 10       D906       I - 1	1		D802	F-9
Q803         F - 7         D808         E - 11           Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7           D815         E - 11           D500         G - 9         D817         H - 8           D502         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1	1		D803	F-9
Q805         F - 7         D809         A - 11           Q1200         H - 7         D810         A - 10           D812         B - 7         D815         E - 11           D500         G - 9         D817         H - 8           D502         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1			D807	E - 9
Q1200         H - 7         D810         A - 10           DB12         B - 7         D815         E - 11           D500         G - 9         D817         H - 8           D502         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1	ì		D808	E - 11
DIODE D812 B - 7 D815 E - 11 D500 G - 9 D502 G - 9 D503 F - 10 D504 I - 10 D505 I - 10 D506 I - 10 D906 I - 1	ì		D809	
DIODE         D815         E - 11           D500         G - 9         D817         H - 8           D502         G - 9         D902         I - 2           D503         F - 10         D903         H - 1           D504         I - 10         D904         H - 1           D505         I - 10         D905         H - 2           D506         I - 10         D906         I - 1	Q1200	H - 7	D810	A - 10
D500 G - 9 D817 H - 8 D502 G - 9 D902 I - 2 D503 F - 10 D903 H - 1 D504 I - 10 D904 H - 1 D505 I - 10 D905 H - 2 D506 I - 10 D906 I - 1	DIODĖ		D812	B - 7
D500 G - 9 D902 I - 2 D503 F - 10 D903 H - 1 D504 I - 10 D904 H - 1 D505 I - 10 D905 H - 2 D506 I - 10 D906 I - 1	DIODE		D815	E - 11
D502 G F G D903 H - 1 D503 F - 10 D904 H - 1 D505 I - 10 D905 H - 2 D506 I - 10 D906 I - 1	D500	G - 9	D817	H - 8
D5004     I - 10     D904     H - 1       D505     I - 10     D905     H - 2       D506     I - 10     D906     I - 1	D502	G - 9	D902	1 - 2
D505 I - 10 D905 H - 2 D506 I - 10 D906 I - 1	D503	F - 10	D903	
D506 I - 10 D906 I - 1	D504	I - 10	D904	H - 1
D300 1 10	D505	I - 10	D905	
D507 G - 9	D506	I - 10	D906	I - 1
	D507	G - 9		

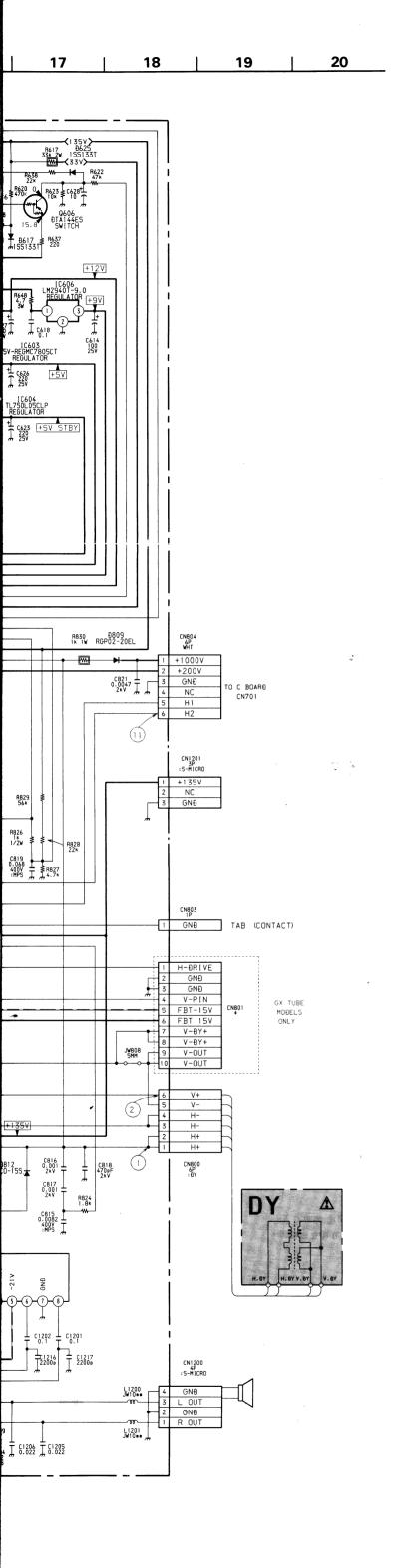


- 39

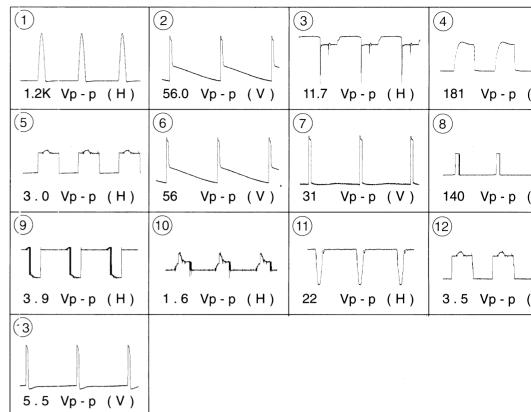


**—** 40 **—** 

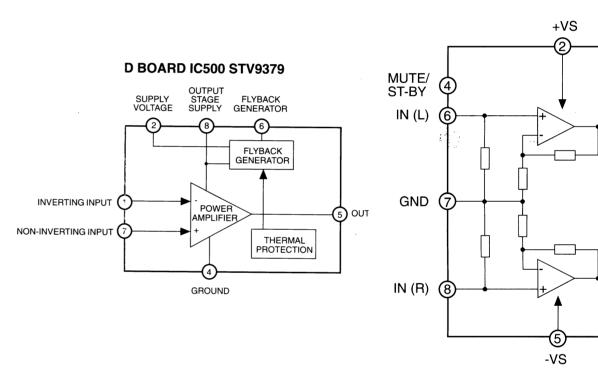
\_\_ 41 \_\_



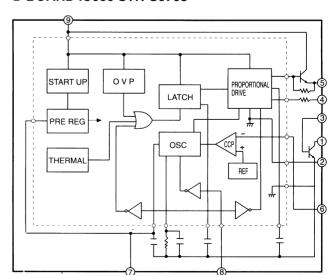
### **WAVEFORMS D BOARD**



### D BOARD IC1200 TDA7

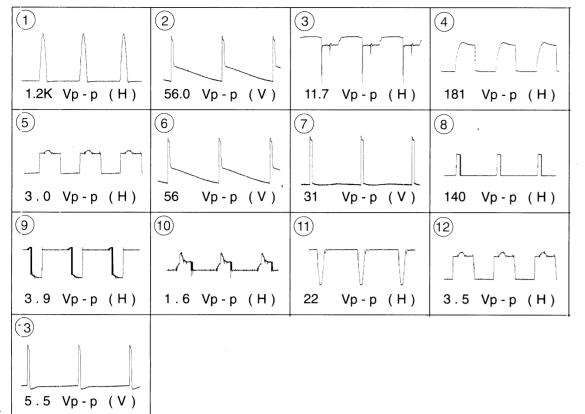


## **D BOARD IC600 STR-S6708**

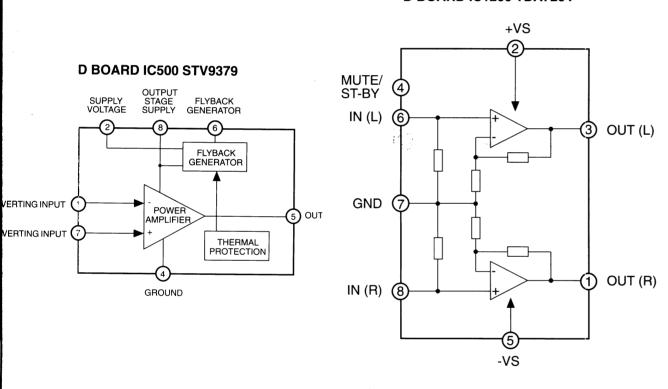


**—** 41 **—** 

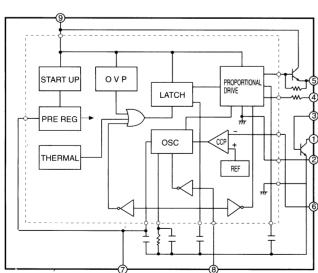
### **WAVEFORMS D BOARD**

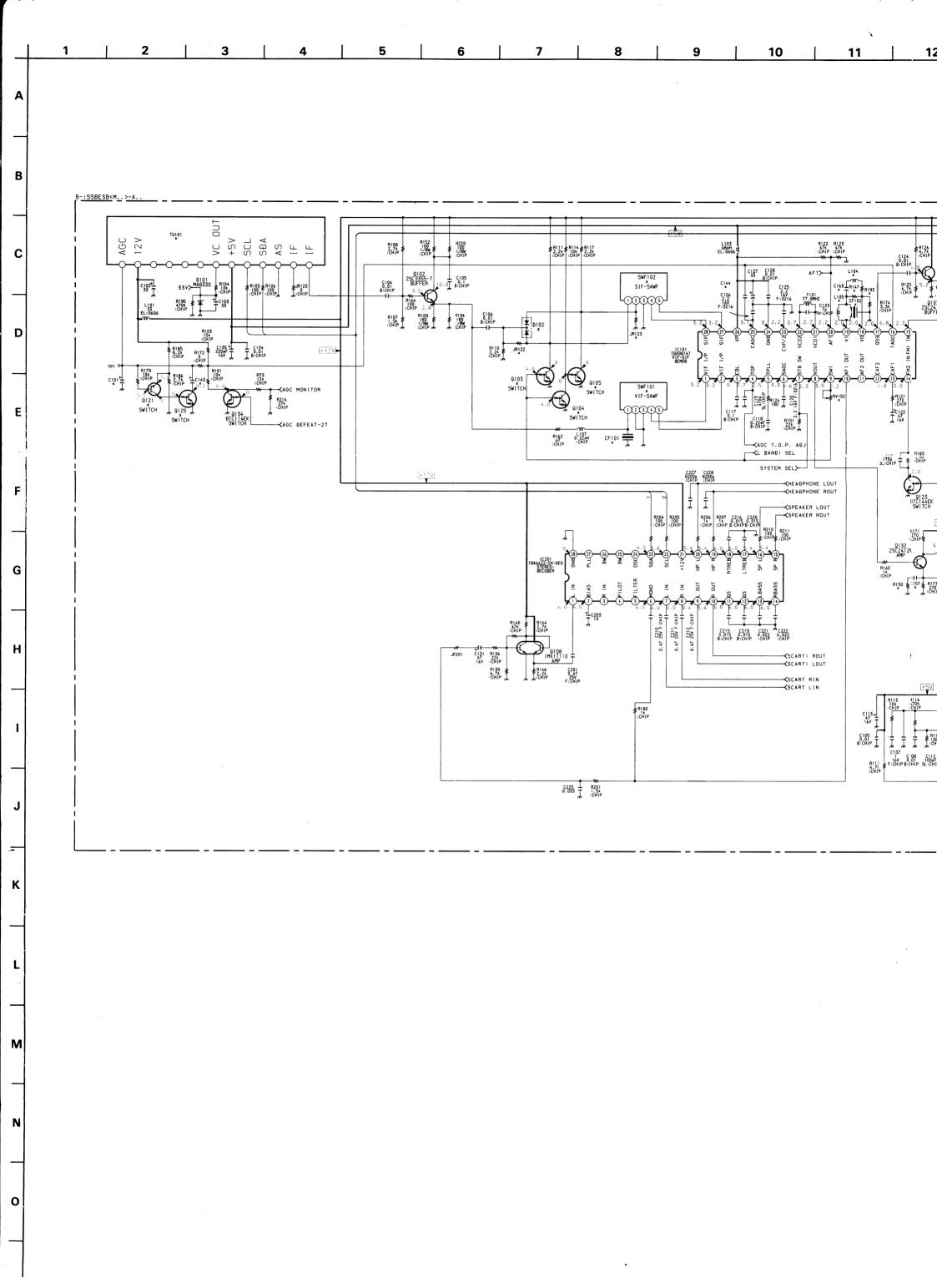


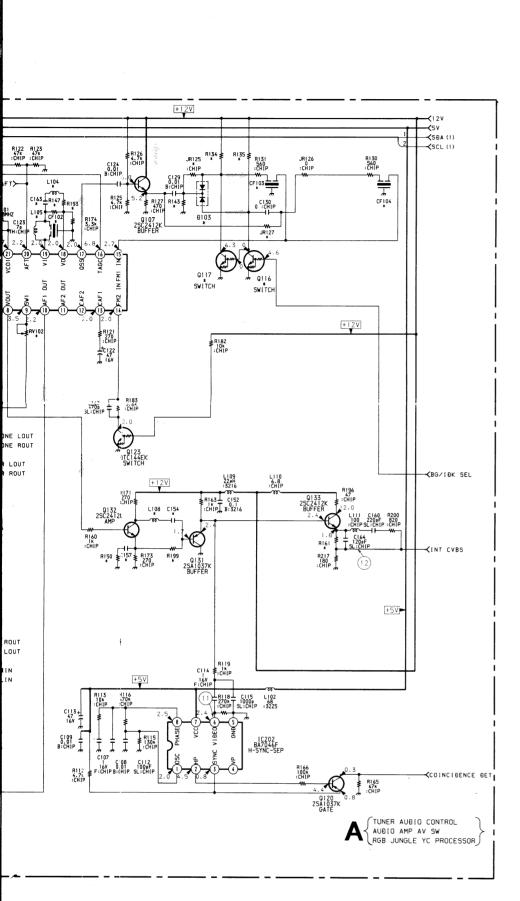
# **D BOARD IC1200 TDA7264**



# D BOARD IC600 STR-S6708



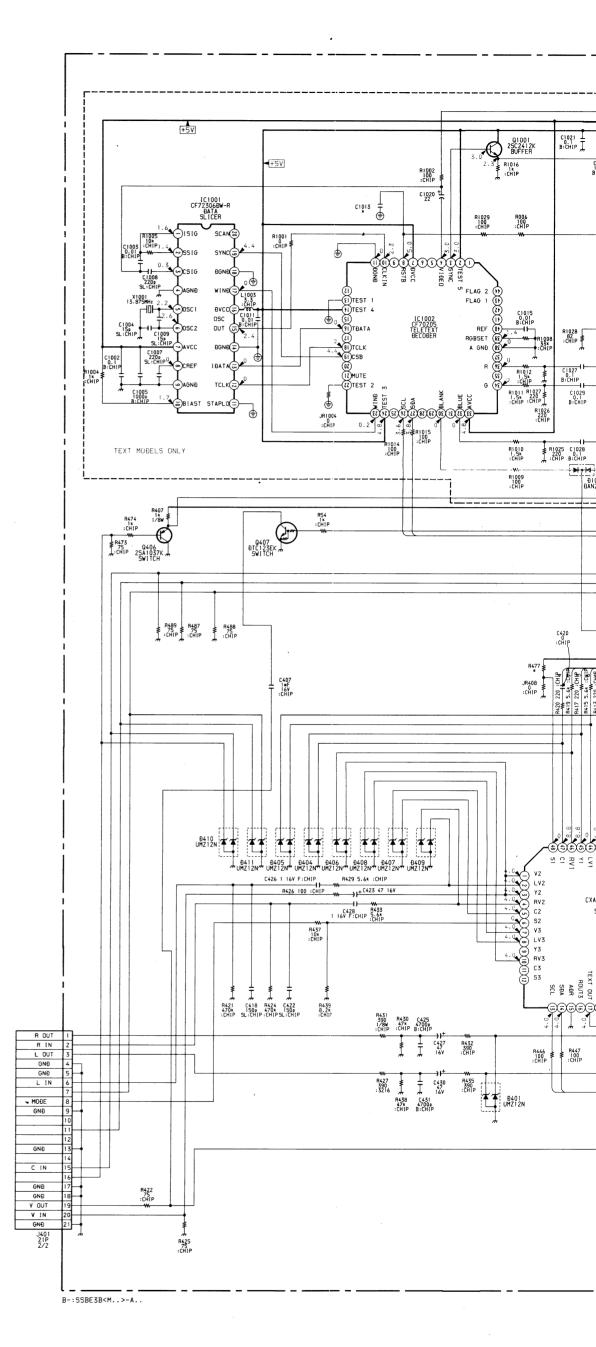


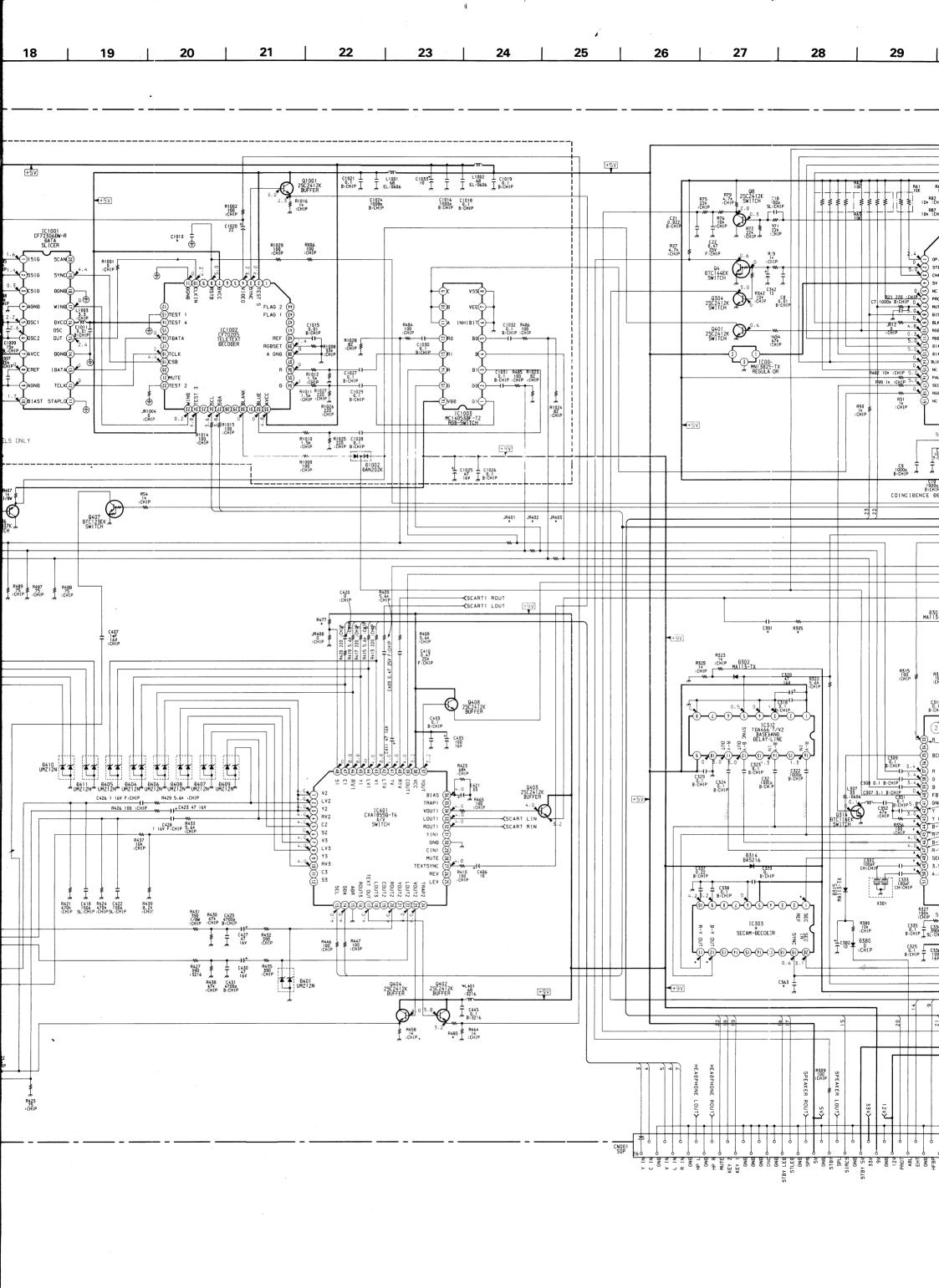


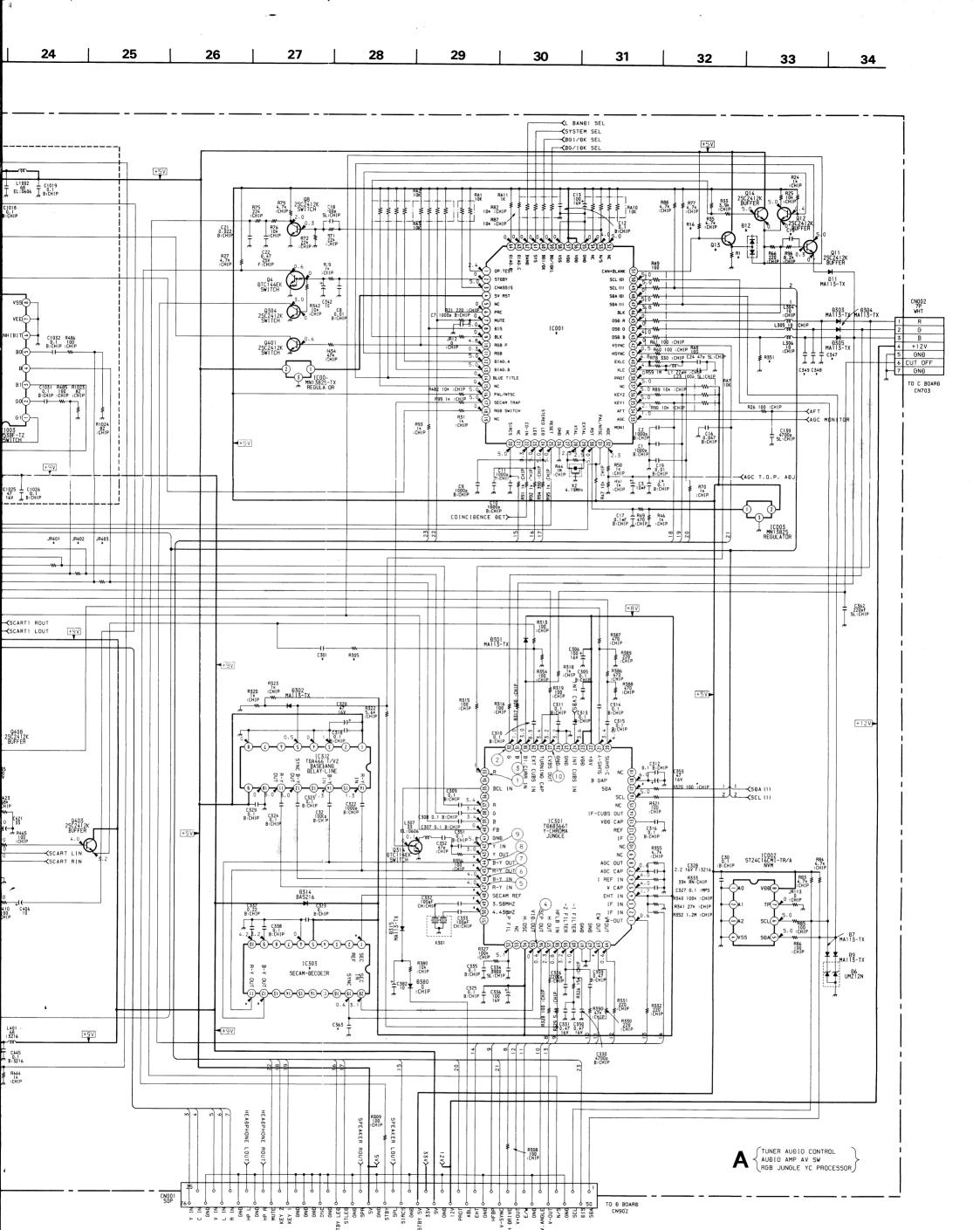
Voltages indicated with the mark % on the schematic diagram are shown in the table below.

# A BOARD

IC	Pin	PAL	SECAM	NTSC 3.58	NTSC . 4.43
IC301	17	4.0	4.0	4.0	0
	35	3.6	2.5	3.5	3.5
	44	1.5	3.1	1.5	1.5
	45	1.5	3.0	1.5	1.5
	48	1.7	4.4	1.6	1.7
	49	1.4	1.4	2.0	1.4
	50	2.0	2.0	1.4	2.0
	63	3.4	2.5	2.2	2.5
IC303	1	1.7	4.4	1.6	1.7
	· 11	1.5	3.0	1.5	1.5
	12	1.5	3.1	1.5	1.5







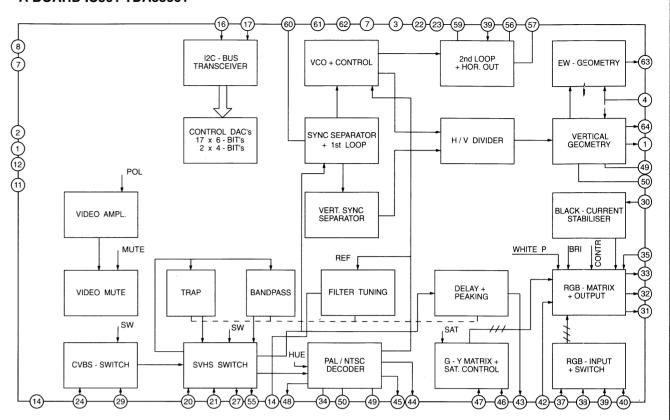
## KV-M254

# KV-M254

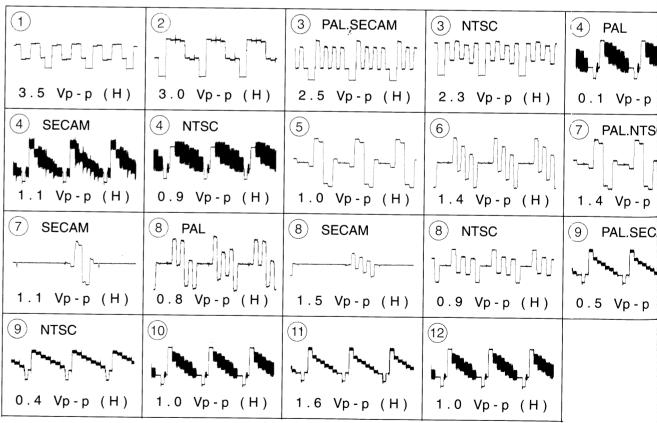
### A BOARD \* MARK

Cold   Symp	Model	M2541A	M2540B	M2540D	M2541D	M2540E	M2541E	M2540K	M2541K	M2541L	M2541U
COLD   SAME	C15	33PF	33PF	33PF				-	-		
CHAP	C101	22UF	4.7UF	22UF		22UF	22UF	22UF	22UF	<del></del>	
Display   1,500	C143	-	100UF	-							
Control   Cont	C144	-	1UF	-	-	-	-	-	-	-	-
Color	C154	180PF	33PF	180PF	180PF	180PF	180PF	180PF	180PF	47PF	47PF
Second   S	C157	68PF	68PF	68PF	120PF	68PF	68PF	68PF	68PF	100PF	100PF
Gampa   Gamp	C163	-	1000PF	-	-	-	-	-	-	-	-
CASA	C301	-	-	-	-	-	-	-	-	470PF	470PF
Corporation	C347	68PF	68PF	68PF	68PF	10PF	10PF	10PF	10PF	68PF	68PF
Cass	C348	68PF	68PF	68PF	68PF	10PF	10PF	10PF	10PF	68PF	68PF
CSSS   228P		68PF	68PF	68PF	68PF	10PF	10PF	10PF	10PF	68PF	68PF
Corp.   19/F		1						47PF	47PF	68PF	68PF
CF1012			22PF	22PF		22PF	22PF	22PF	22PF	-	-
CF102		1MF	-				-		-	1MF	1MF
CF102							EFCV4045A4	EFCV4045A4	EFCV4045A4	-	-
CF109					-					6.0MHZ	6.0MHZ
CF109										-	-
Dig					L			· · · · · · · · · · · · · · · · · · ·			
DOCK   CAMPASCOR							1				
DAMSOUR   CAPRESER 1120   CA		-									
COORDINATION   COOR		-				-	-			-	-
TDAS995T		CXP85228-113O				CYP95229 112C	CYP95000 1100			- CVD05000 1100	- CVD95000 1100
UFISEZ 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		OXI 65225 TTGQ				CAF 63226-113Q	CAF63226-113Q			CAP65226-113Q	CAP85228-113Q
UPI123 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		. 0				0	0			-	-
JIFIES											
JH127											
JAHQ1											
JAMA22	JR401	-	0	0	-	0	-	0	-		
JHA03	JR402	-	0	0	-	0	-		-		
15UH	JR403	-	0	0	-	0	-	0	-		
108	L104	-	100UH	-	-	-	-	-	-		
Q13	L105	15UH	5.6UH	15UH	15UH	15UH	15UH	15UH	15UH	15UH	15UH
OTTO	L108	10UH	27UH	10UH	10UH	10UH	10UH	10UH	10UH	10UH	10UH
OTTO	Q13	-	2SC2412K	S -	-	-	2SC2412K	-	-	-	-
OTTO	Q103	-	DTC114EK	-	-	-	-	-	-	-	-
OTTO	Q104	-		-	-	-	-	-	-	-	-
OTTO		-		-		-	-		-	-	
Q121         .         2SA1162-G         . <t< td=""><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td>-</td><td>DTC144EK</td><td>DTC144EK</td><td>-</td><td>-</td></t<>		-				-	-	DTC144EK	DTC144EK	-	-
Q125         -         DTC114EK         - <th< td=""><td></td><td>-</td><td></td><td>DTC144EK</td><td>DTC144EK</td><td>-</td><td>-</td><td>DTC144EK</td><td>DTC144EK</td><td>-</td><td>-</td></th<>		-		DTC144EK	DTC144EK	-	-	DTC144EK	DTC144EK	-	-
R1						-	-	-	-	-	-
R16         .         1K         .						-	-			-	-
R134         -         2.2K         2.2K         2.2K         2.2K         -         -         2.2K         2.2K         -<						-				-	-
R135											
R143         -         2.2K         2.2K         2.2K         2.2K         -         -         2.2K         2.2K         -											
R147         220         180         220         220         220         220         220         330         330           R150         0         0         0         0         0         0         0         1.5K         1.5K           R161         180         180         180         180         180         180         180         180         180         180         180         180         180         180         820         820           R193         -         11K         -											
R150	R147										
R161	R150										
R193	R161										
R199         330         1.2K         330         330         330         330         330         330         1K         1K           R305         -         -         -         -         -         -         -         1K         1K           R351         6.8K         6.8K         6.8K         -         -         -         -         -         6.8K         6.8K           R365         100         100         100         100         100         100         100         120         120           R477         -         -         -         -         -         -         -         5.6K         5.6K           R483         1.2K         820         820           RV102         -         2ZK         - <td>R193</td> <td></td>	R193										
R305         -	R199										
R351         6.8K         6.8K         6.8K         -         -         -         6.8K         6.8K           R365         100         100         100         100         100         100         100         120         120           R477         -         -         -         -         -         -         5.6K         5.6K           R483         1.2K         1.2K         1.2K         1.2K         1.2K         1.2K         1.2K         1.2K         820         820           RV102         -         2ZK         -	R305										
R365         100         100         100         100         100         100         100         120         120           R477         -         -         -         -         -         -         5.6K         5.6K           R483         1.2K         1.2K         1.2K         1.2K         1.2K         1.2K         1.2K         820         820           RV102         -         2ZK         -<	R351	6.8K	6.8K	6.8K	6.8K	-	-	-	-		
R477         -         -         -         -         5.6K         5.6K           R483         1.2K	R365	100	100	100	100	100	100	100	100		
R483         1.2K         1.2K         1.2K         1.2K         1.2K         1.2K         1.2K         1.2K         1.2K         820         820           RV102         -         2ZK         -	R477	-	-	-	-	-	-	-			
RV102         -         22K         - </td <td>R483</td> <td>1.2K</td> <td>1.2K</td> <td>1.2K</td> <td>1.2K</td> <td>1.2K</td> <td>1.2K</td> <td>1.2K</td> <td>1.2K</td> <td></td> <td></td>	R483	1.2K	1.2K	1.2K	1.2K	1.2K	1.2K	1.2K	1.2K		
SWF102 K9350M K9453M K9350M K9350M K9350M K9350M K9350M K9350M K9350M K9350M	RV102	-	22K	-	-	-	-	-			
THE THE PROPERTY OF THE PROPER	SWF101	K3953M	K3953M	K3953M	K3953M	K3953M	K3953M	K3953M	K3953M	K3953M	J3950M
TU101 UV-916H U-944C	SWF102		K9453M	K9350M	K9350M	K9350M	K9350M	K9350M	K9350M	K9350M	K9350M
	TU101	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	U-944C

### A BOARD IC301 TDA8366T



### **WAVEFORMS A BOARD**





- A BOARD -

EW - GEOMETRY

BLACK - CURRENT STABILISER

> RGB · MATRIX + OUTPUT

> > (4) PAL

0.1 Vp-p (H)

1.4 Vp-p (H)

9 PAL.SECAM

0.5 Vp-p (H)

7 PAL.NTSC

47-46-43-42-37-33-39-40-

DIVIDER

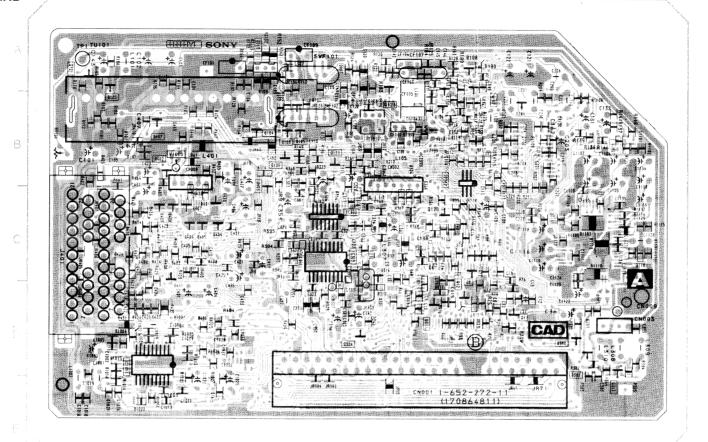
NTSC

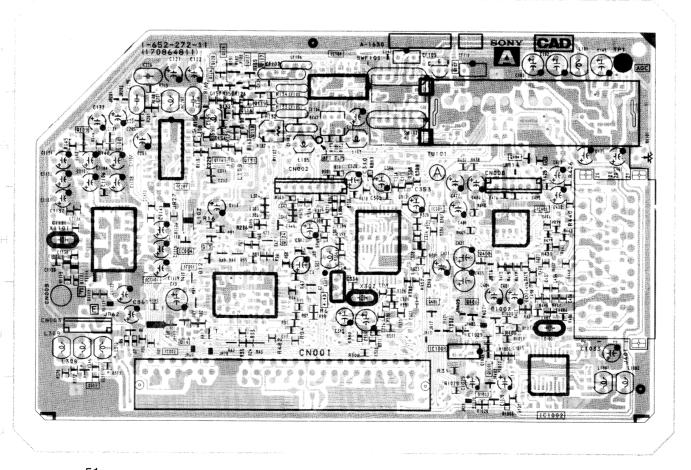
3 Vp-p (H)

4 Vp-p (H)

9 Vp-p (H)

Vp-p (H)

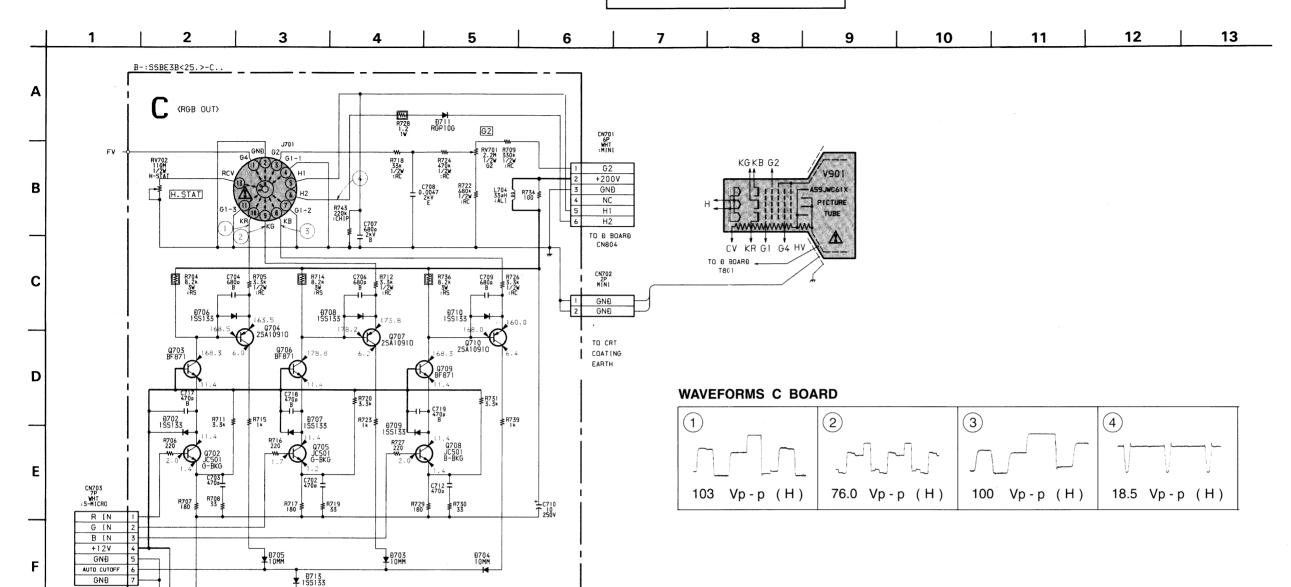




	IC	Q313	J - 1
IC001	H - 2	Q314	C - 4
IC001	1-2	Q380	D - 6
IC101	F - 4	Q38	D-6
IC201	G - 2	Q401	I - 5
IC202	B - 5	Q402	B - 2
IC301	H - 5	Q403	B - 3
IC302	C - 4	Q404	G - 6
IC303	C - 4	Q1001	I - 6
IC401	H - 6	Q1003	J - 5
IC1001	D - 2		
IC1001	J - 6	D	IODE
IC1002	I - 5	D6	1 - 2
IC1101	H - 2	D7	1-2
101101	11-2	D9	1 - 2
TRAN	ISISTOR	D11	D - 5
		D101	B - 2
Q4	D - 6	D102	B - 4
Q8	C - 5	D103	A - 5
Q11	D - 5	D201	B - 6
Q12	C - 5	D301	G - 4
Q14	I - 2	D302	C - 4
Q102	F - 5, A - 3	D303	H - 3
Q103	B - 3	D304	B - 5
Q104	B - 3	D305	C - 4
Q105	B - 3	D314	B - 3
Q107	B - 5	D380	I - 4
Q108	G - 2	D401	C - 2
Q109	G - 1	D402	C - 2
Q114	G - 3	D404	C - 2
Q116	G - 3	D405	C - 2
Q117	F - 3	D406	C - 2
Q120	C - 5	D407	C - 2
Q121	A - 1	D408	C - 2
Q123	B - 4	D409	C - 2
Q124	F-3	D410	C-2
Q125	B - 1	D411	D - 2
Q130	B - 3	D1002	1-6
Q131	G - 3	D1003	J - 6
Q132	G - 3	D1101	H - 1
Q133	B - 4	D1102	C - 7
Q304	D - 4		
Q312	E-7		-

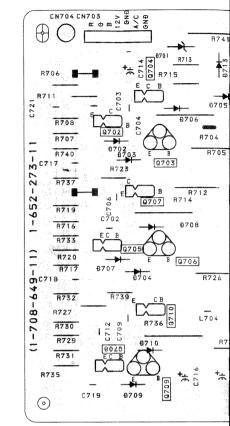
#### Note:

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.





# - C BOARD -



₩12701 ₩1273.10

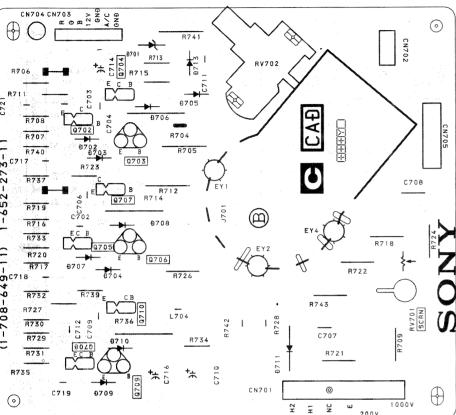
+ C714 1000 T 16V

TO A BOARĐ

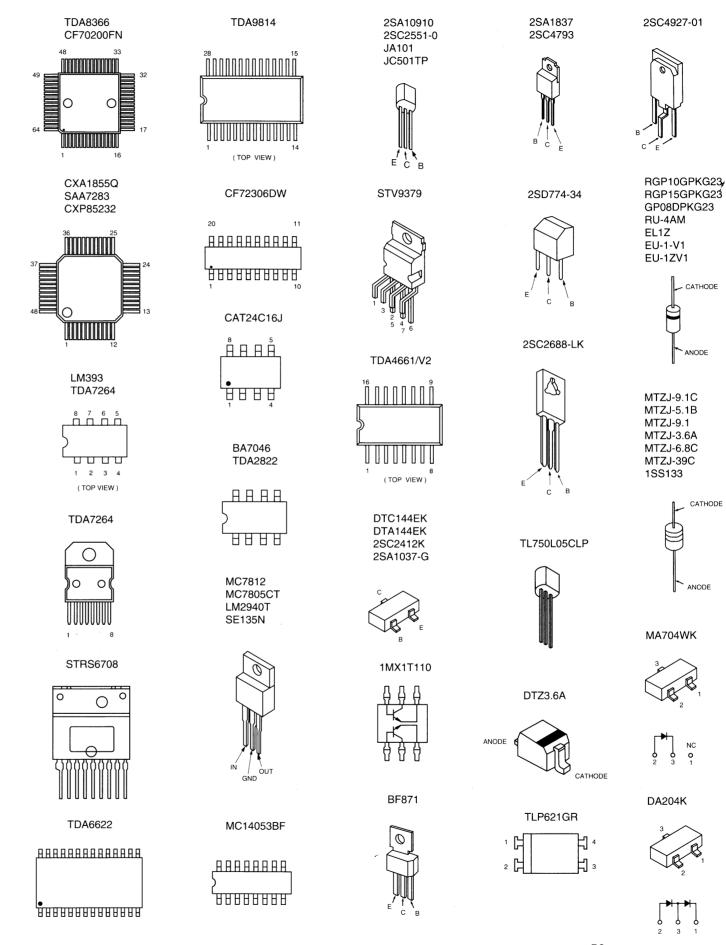
G



# C BOARD -



## **5.4 SEMICONDUCTORS**



UMZ12N

MA8039

MA113

SLR-54VR3

ANODE '

## **SECTION 6**

# **EXPLODED VIEWS**

### NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.

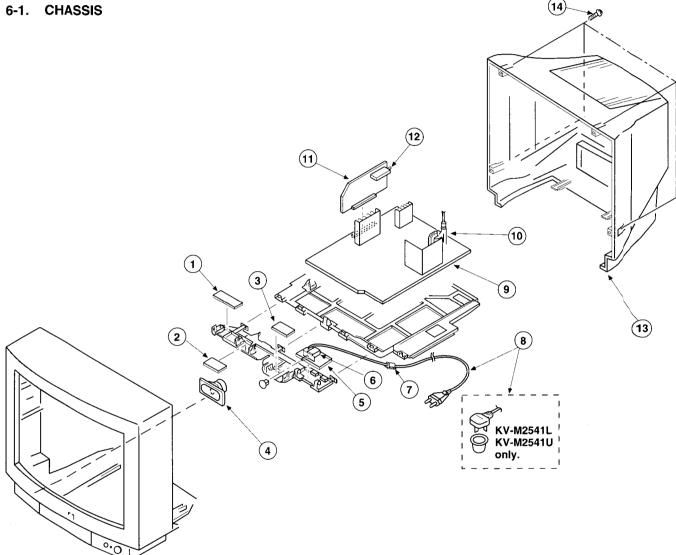
Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked A are critical for safety.

Replace only with the part number

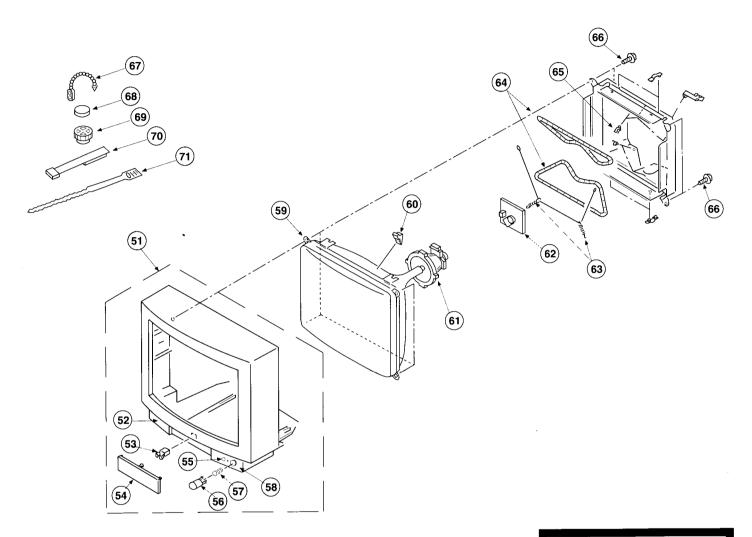
specified.

Temarks colur



		$\checkmark$					
REF NO	PART NO	DESCRIPT	ION REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	*1-652	2-275-11	H1 BOARD	10	1-453-169-11	FBT ASSY (UX1604A2)	1
2	*1-652	2-270-11	H3 BOARD	11	*A-1632-239-A	A BOARD, COMPLETE	(W- <b>M</b> 2541A)
3	*1-652	2-269-11	H2 BOARD		*A-1632-240-A	A BOARD, COMPLETE	(IV-1M2540B)
4	1-504	1-698-11	SPEAKER		*A-1632-236-A	A BOARD, COMPLETE	(IV-1M2540D)
5	*1-652	2-271-11	F1 BOARD		*A-1632-235-A	A BOARD, COMPLETE	(IV- <b>1</b> M2541D)
6	.j. 1-571	1-433-11	SMETCH, PUSH (AC POMBR)		*A-1632-226-A	A BOARD, COMPLETE	(IV- <b>M</b> 2540E)
			HOLDER, AC CORD			A BOARD, COMPLETE	
ğ			CORD. POWER (WITH MOISE PILITER):		*A-1632-230-A		(IV- <b>1M</b> 2540K)
1000		100	(KV-M2541A/M2540D/M2541D)		*A-1632-229-A	A BOARD, COMPLETE	(IV-1M2541K)
12.5	<b>∆</b> 1-59(	0-460-11	CORD. POWER (NITH CONNECTOR)		*A-1632-241-A	A BOARD, COMPLETE	( <b>₩-14</b> 2541L)
	35.59	19	(RV-M2540B/M2540B/M2541B/M2540K/M2544K)		*A-1632-211-A	A BOARD, COMPLETE	(N-M2541U)
354	A 7 1-590	1-762-11	CORD, POWER (NITH PLUG)	12	1-693-185-11		-:25 <b>4</b> 1A/M2540B/
3	2007 19500	1000	(KV-M25410/M254MJ)			M2540D/M2541D	/125 40E/M2541E/
9	*A-164	42-121-A	D BOARD, COMPLETE (KV-M2541A/M2540B/			M2541L/M2540K	/125 <b>4</b> 1K)
			M2540D/M2541D/M2540E/M2541E/		1-693-184-11	TUNER (U944C) (KV-1	M54 10)
			M2540K/M2541K)	13	4-202-835-01		
	*A-164	42-134-A	D BOARD, COMPLETE (KV-M2541L/M2541U)	14	4-039-358-01	SCREW (4x16), (+) I	TAPPING

## 6-2. PICTURE TUBE



The components identified by shading and marked are critical for safety.

Replace only with the part number specified.

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
51	X-4200-172-2	BEZNET ASSY	52-58	62	*A-1638-052-A	C BOARD, COMPLETE	
52	4-202-833-01	FRAME, SPEAKER				(KV-M2541A/M2540E	
53	4-392-036-01	CATCHER, PUSH				M2540E/M2541E	Z/M2540K/M2541K)
54	4-202-831-01	DOOR			*A-1638-045-A	C BOARD, COMPLETE	
55	4-202-830-01	LID				(K7	7-M2541L/M2541U)
56	4-202-834-01	BUTTON, POWER		63	4-303-774-11	SPRING, GROUND WIR	E
57	4-329-112-00	SPRING		ALC: A 1 TO SECURE OF THE PERSON OF THE PERS		COIL, DEGAUSSING	
58	4-202-832-21	WINDOW, ORNAMENTAL (F	W-M2541A)	65	4-385-916-01		
	4-202-832-01	WINDOW, ORNAMENTAL		66	4-036-188-01	* * - · · · · · · · · · · · · · · · · ·	
		(KV-M2540B/M2540	D/M2540E/M2540K)	67	4-308-870-00	CLIP LEAD WIRE	
	4-202-832-11	WINDOW, ORNAMENTAL		68	1-452-032-00		
		(KV-M2541D/M2541E/M254:	LK/M2541L/M2541U)	69	1-452-094-00	MAGNET, ROTATABLE	DISK; 15MMØ
59	A 8-733-231-05	CRT SD-178 (A59JWC61)	)	70	X-4387-214-1	PERMALLOY ASSY, CO	RRECTION
60	3-704-495-01		and the second s	71	3-701-007-00	BAND, BINDING	
61	A 8-451-311-34	DEPLECTION YOLK (Y25)	XA)	100 100 100 100 100 100 100 100 100 100			

# **ELECTRICAL PARTS LIST SECTION 7**

The components identified by shading and marked 1 are critical for safety.

Replace only with the part number specified.

Items marked "\* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

### **RESISTORS**

- All resistors are in ohms
- E · nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

MF: mF, PF: mmF

 $MMH: mH, \mu H: mH$ 





			• F: nonflammal	ole		L		/ /
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION		REMARK
	*1-652-271-11	F1 BOARD		C12	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
	< CO1	NECTOR >		C13 C15		ELECT 100MF CERAMIC CHIP 33PF 1/M2540B/M2540D/M2541	20% 5% LD/ <b>w</b> 2541t./ <b>w</b> 2	16V 50V 541H)
		) 17		C16 C17	1-163-809-11	CERAMIC CHIP 0.047N CERAMIC CHIP 0.1MF		25V 25V
	< FUS	SE >		C18 C19		CERAMIC CHIP 100PF CERAMIC CHIP 0.01MF	5% 10%	50V 50V
<b>2601</b> . A	1-576-492-21 1-573-230-11	POSE (B.B.C.) 51 250V HOLDER, PUSE (P601)		C21 C22 C23	1-163-037-11 1-164-005-11	CERAMIC CHIP 0.022N CERAMIC CHIP 0.47MI CERAMIC CHIP 100PF	fF 10%	25V 25V 50V
	< SW]	ITCH >		C24		CERAMIC CHIP 47PF	5%	50V
8601 <u>. 2</u>	ETT (AZ ATALIA 1997) T. Z.	SMETCH, POSH (AC POINS)		C30 C101	1-164-004-11 1-124-916-11	CERAMIC CHIP 0.1MF	10% 20%	25V 50V
	*A-1632-239-A	A BOARD, COMPLETE (KV-M2	541A)		1-124-927-11	M2541	K/M2541L/M2 20%	
		***************** A BOARD, COMPLETE (KV-M2	·				(KV-M2	
		A BOARD, COMPLETE (KV-M2		C102 C103	1-124-917-11 1-124-917-11		20% 20%	50V 50V
		************************** A BOARD, COMPLETE (KV-M2		C104 C105	1-164-232-11 1-164-004-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.1MF	10% 10%	50V 25V
	*A-1632-226-A	A BOARD, COMPLETE (KV-M2	540E)	C106		CERAMIC CHIP 0.01MF	10%	50V
	*A-1632-202-A	A BOARD, COMPLETE (KV-M2	541E)	C107 C108 C109	1-164-232-11	CERAMIC CHIP 1MF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF		16V 50V 50V
	*A-1632-230-A	A BOARD, COMPLETE (KV-M2	540K)	C112 C113		CERAMIC CHIP 100PF	5% 20%	50V 50V 16V
	*A-1632-229-A	A BOARD, COMPLETE (KV-M2	541K)	C114		CERAMIC CHIP 1MF	200	16V
	*A-1632-241-A	A BOARD, COMPLETE (KV-M2	541L)	C115 C117	1-163-141-00	CERAMIC CHIP 0.001M CERAMIC CHIP 0.1MF	F 5% 10%	50V 25V
	*A-1632-211-A	A BOARD, COMPLETE (KV-M2	541U)	C118 C119	1-164-489-11 1-163-133-00	CERAMIC CHIP 0.22MF CERAMIC CHIP 470PF	10% 5%	16V 50V
TP1	1-508-784-00	PIN, CONNECTOR (5MM PITC	H) 1P	C120 C122	1-164-337-11 1-124-477-11	CERAMIC CHIP 2.2MF ELECT 47MF	20%	16V 16V
	< CAF	PACITOR >		C123 C124		CERAMIC CHIP 7PF CERAMIC CHIP 0.01MF	0.25 P 10%	7 50V 50V
C1 C2		CERAMIC CHIP 0.001MF CERAMIC CHIP 0.001MF	10% 50V 10% 50V	C125		CERAMIC CHIP 2.2MF	,	16V
C3 C4	1-124-907-11		20% 50V 10% 25V	C126 C127	1-164-337-11 1-124-917-11	CERAMIC CHIP 2.2MF ELECT 33MF	20%	16V 50V
C7		CERAMIC CHIP 0.001MF	10% 25V 10% 50V	C128 C129	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V 50V 50V
C8 C9	1-164-232-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.001MF	10% 50V 10% 50V	C130	1-216-295-91	CERAMIC CHIP 0.01MF METAL GLAZE 0	10% 5%	1/10W
C10 C11	1-163-009-11	CERAMIC CHIP 0.001MF CERAMIC CHIP 0.001MF	10% 50V 10% 50V 10% 50V	C131 C134	1-124-477-11 1-164-232-11	ELECT 47MF CERAMIC CHIP 0.01MF	20% 10%	16V 50V



<b>/</b> \										
REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTION	<u>ON</u>		REMARK
C135 C139	1-126-176-11 1-163-017-00	ELECT 220MF CERAMIC CHIP 0.0047MF	20% 10%	10V 50V	C327	1-136-165-00	FILM	0.1MF	5%	50V
C142	1-163-133-00	CERAMIC CHIP 470PF	5%	50V	C328 C329	1-164-337-11 1-164-004-11	CERAMIC CHIP		10%	16V 25V
C143	1-126-101-11	ELECT 100MF	(KV-M25	16V 40B)	C330 C331	1-163-017-00 1-165-320-11	CERAMIC CHIP CERAMIC CHIP		10% 10%	50V 16V
C144	1-164-346-11	CERAMIC CHIP 1MF	(KV-M25	16V	C332	1-163-251-11			5%	50V
C152	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C333 C334	1-163-251-11 1-163-016-00	CERAMIC CHIP		5% 10%	50V 50V
C154	1-163-123-00 (KV-M2541A/M2	CERAMIC CHIP 180PF 540D/M2541D/M2540E/M2541E	5% 3/M2540K	50V	C335 C336	1-164-004-11 1-126-101-11	CERAMIC CHIP ELECT	0.1MF 100MF	10% 20%	25V 16V
		CERAMIC CHIP 33PF	M25 5%	41K) 50V	C337	1-164-489-11			10%	16V
	1-163-109-00	CERAMIC CHIP 47PF	(KV-M25 5%	50 <b>V</b>	C338 C339	1-164-004-11 1-164-004-11	CERAMIC CHIP		10% 10% 20%	25V 25V 50V
		·	541L/M25	-	C342 C346	1-124-907-11 1-163-133-00 1-163-113-00	CERAMIC CHIP	470PF	20% 5% 5%	50V 50V 50V
C157		CERAMIC CHIP 120PF	5% (KV-M25		C347		/M2540B/M2540	D/M2541D/M2		
	(KV-M2541A	CERAMIC CHIP 68PF ./M2540D/M2540E/M2541E/M2! CERAMIC CHIP 100PF	5% 540K/M25 5%	50V 41K) 50V		1-102-032-00		E/M2541E/M2!		
	1-163-117-00		541L/M25		C348	1-163-113-00 (KV-M2541A	CERAMIC CHIP /M2540B/M2540		5% 541L/M2	50V 541U)
C160 C163	1-163-125-00 1-163-141-00	CERAMIC CHIP 220PF CERAMIC CHIP 0.001MF	5% 5%	50V 50V		1-163-093-00	CERAMIC CHIP		5% 540K/M2	50V 5 <b>41</b> K)
C164	1-163-119-00	CERAMIC CHIP 120PF	(KV-M25 5%	50Ý	C349		/M2540B/M2540	D/M2541D/M2		
C201	1-164-005-11			25V		1-163-093-00		10PF E/M2541E/M2	5% 540K/M2	50V 541K)
C203 C210	1-124-907-11 1-164-005-11	CERAMIC CHIP 0.47MF	20%	50V 25V	C350	1-165-320-11 1-164-004-11			10% 10%	16V 25V
C211 C212	1-164-005-11 1-164-005-11	CERAMIC CHIP 0.47MF	1.00	25V 25V	C351 C352	1-164-004-11 1-163-109-00 1-124-477-11	CERAMIC CHIP		5% 20%	50V 16V
C215	1-163-023-00		10% 10%	50V 50V	C353 C355	1-124-4//-11 1-163-109-00 (KV-M2541A/M2	CERAMIC CHIP	47PF	5%	50V
C216 C219 C220	1-163-011-11 1-163-023-00		10% 10% 10%	50V 50V		1-163-113-00		M2:	540K/M2 5%	
C221 C222	1-163-037-11 1-163-037-11 1-163-037-11	CERAMIC CHIP 0.022MF	10% 10% 10%	25V 25V		1 100 110 00	V2122120 VIII-		541L/M2	541U)
C225	1-130-489-00	FILM 0.033MF	5%	50V	C359 C361	1-164-005-11 1-124-907-11		0.47MF 10MF	20%	25V 50V
C227 C228	1-163-020-00		10% 10%	50V 50V	C362 C363	1-163-125-00 1-163-101-00	CERAMIC CHIE	22PF	5% 5%	50V 50V
C301	1-163-113-00	CERAMIC CHIP 470PF	5% 541L/M25	50V 541U)			540B/M2540D/M	M2	540K/M2	541K)
C305		CERAMIC CHIP 0.1MF	10%	25V	C382	1-124-907-11		10MF	20%	50V
C306 C307		CERAMIC CHIP 0.1MF	20% 10%	16V 25V	C383 C406	1-163-101-00 1-124-907-11	ELECT	10MF	5% 20%	50V 50V
C308 C309	1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10% 10%	25V 25V	C407 C409	1-164-346-11 1-164-005-11	CERAMIC CHIE	0.47MF		16V 25V
C310	1-164-004-11		10%	25V	C410	1-164-005-11 1-124-477-11		47MF	20%	25V 16V
C311 C312	1-164-004-11	CERAMIC CHIP 0.1MF	10% 10% 10%	25V 25V	C411 C418 C420	1-124-477-11 1-163-121-00 1-216-295-91	CERAMIC CHIE		5% 5%	50V 1/10W
C313 C314	1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10%	25V 25V 25V	C421 C422	1-124-917-11 1-163-121-00	ELECT	33MF	20% 5%	50V 50V
C315 C316	1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10% 10%	25V 25V	C423	1-103-121-00		47MF	20%	16V
C318 C320		CERAMIC CHIP 0.1MF	10% 20%	25V 16V	C425 C426	1-163-017-00 1-164-346-11	CERAMIC CHIE		10%	50V 16V
C321 C322	1-163-009-11	CERAMIC CHIP 0.001MF CERAMIC CHIP 0.001MF	10% 10%	50V 50V	C427 C428	1-124-477-11 1-164-346-11	ELECT	47MF	20%	16V 16V
C323		CERAMIC CHIP 0.1MF	10%	25V	C430	1-124-477-11 1-163-017-00		47MF	20% 10%	16V 50V
C324 C325	1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10% 10% 10%	25V 25V 50V	C431 C433 C435		CERAMIC CHI		10% 10% 20%	25V 16V
C326	1-104-101-11	CERAMIC CHIP 0.0022MF	10%	JU 4	C#33	I-120-101-11	DUDÓ I	TOOM	~ 0	



REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C445	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	D102 D103		DIODE DAN202K (KV-M254) DIODE DAN202K (KV-M254)	
(		002 - C1033 > 0/M2541E/M2541K/M2541L/M2	2541U)		D301	8-719-041-97	M2541D/M2	2540K/M2541K)
C1002 C1003 C1004 C1005 C1007	1-164-004-11 1-164-232-11 1-163-097-00 1-163-009-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.01MF CERAMIC CHIP 15PF CERAMIC CHIP 0.001MF CERAMIC CHIP 220PF	10% 10% 5% 10% 5%	25V 50V 50V 50V 50V	D302 D303 D304 D305 D314	8-719-041-97	DIODE MA113-TX DIODE MA113-TX	
C1008 C1009 C1011 C1013	1-163-097-00	CERAMIC CHIP 220PF CERAMIC CHIP 15PF CERAMIC CHIP 0.01MF CERAMIC CHIP 1MF (KV-M2541A/M2541D/M2	5% 5% 10% 2541L/M2	50V 50V 50V 16V 541U)	D315 D380 D401 D404 D405	8-719-047-41		1/10W
C1015 C1016 C1018 C1019 C1020	1-163-009-11 1-164-004-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.001MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF ELECT 22MF	10% 10% 10% 10% 20%	50V 50V 25V 25V 50V	D406 D407 D408 D409 D410	8-719-047-41 8-719-047-41 8-719-047-41	DIODE UMZ12N-T146 DIODE UMZ12N-T146 DIODE UMZ12N-T146 DIODE UMZ12N-T146 DIODE UMZ12N-T146	
C1021 C1024 C1025 C1026 C1027	1-163-009-11 1-124-477-11 1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.001MF ELECT 47MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10% 10% 20% 10% 10%	25V 50V 16V 25V 25V	D411 D1002		DIODE UMZ12N-T146 DIODE DAN202K	
C1028 C1029 C1030 C1031 C1032	1-164-004-11 1-164-004-11 1-164-004-11 1-164-004-11	CERAMIC CHIP 0.1MF	10% 10% 10% 10% 10%	25V 25V 25V 25V 25V	IC001	(KV-M2540B/M2 8-752-855-69 (KV-M2541A/M2 8-752-854-74 (KV-M2540E/M2 8-752-851-53	IC CXP85232-109Q-TL 2540D/M2541K) IC CXP85232-110Q-TL	
C1033	1-124-907-11		20%	50V		(KV-M2541E)		
CF101	1-760-154-21 (KV-M2540B/M	RAMIC FILTER >  TRAP, CERAMIC 2540D/M2541D/M2540E/M2541		K/ 541K)	IC002 IC003 IC004 IC101 IC201	8-759-041-54 8-759-041-54 8-759-277-66		
CF102	(KV-M2541A/M 1-409-430-11	TRAP, CERAMIC (5.5MHZ) 2540D/M2541D/M2540E/M2541 TRAP, CERAMIC (6.5MHZ) TRAP, CERAMIC (6.0MHZ) (KV-M2	M2	541K) 40B)	IC202 IC301 IC302 IC303	8-759-251-56	IC TDA8366T IC TDA4661T/V2	lk)
CF103		FILTER, CERAMIC 2540B/M2540D/M2541D/M2540			IC401		IC CXA1855Q-T6	
CF104	1-567-100-00	FILTER, CERAMIC (KV-M25		41L/	(K		.001 - IC1003 > )/M2541E/M2541K/M2541L/M2	2541U)
CF109	1-760-154-21	TRAP, CERAMIC (KV-M2541			IC1001 IC1002 IC1003	8-759-275-29	IC CF72306DW-R IC CF70205AFN-R IC HD14053BFP	
	< CO	NNECTOR >				< CO1		
CN001 CN002 CN003	*1-568-882-51	CONNECTOR, BOARD TO BOA PIN, CONNECTOR 7P PIN, CONNECTOR 4P	ARD 50P		L1 L101 L102	1-412-010-41 1-408-609-41	INDUCTOR CHIP 22UH	
	< DI	ODE >			L103 L104	1-408-419-00		
D6 D7 D9 D11	8-719-041-97 8-719-041-97	DIODE UMZ12N-T146 DIODE MA113-TX DIODE MA113-TX DIODE MA113-TX			L105	1-408-411-00	(KV-M2540B)	E/M2540K/
D12 D101	8-719-049-64	DIODE MA715-TX (KV-M254 DIODE MA8330	40B/M254:	1E)		1-408-406-00	M2541K/M25	41L/M2541U)



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	<u>DN</u>	REMARK
L107 L108	1-408-409-00	540D/M2541D/M2540E/M2541E		Q314 Q380 Q381	8-729-920-74	TRANSISTOR D TRANSISTOR 2 TRANSISTOR 2	SC2412K-QR	
	1-408-414-00	M2541K/M254 INDUCTOR 27UH (KV-M2540B)	1L/M2541U)	Q401 Q402	8-729-920-74 8-729-920-74	TRANSISTOR 2 TRANSISTOR 2	SC2412K-QR SC2412K-OR	
L109	1-412-010-41	INDUCTOR CHIP 22UH		Q403 Q404	8-729-920-74 8-729-920-74	TRANSISTOR 2 TRANSISTOR 2	SC2412K-QR SC2412K-QR	
L110 L111	1-412-004-31 1-414-170-11	INDUCTOR CHIP 100UH		Q406		TRANSISTOR 2		
L304 L305	1-412-006-31 1-412-006-31	INDUCTOR CHIP 10UH INDUCTOR CHIP 10UH		Q407 Q408 O1001		TRANSISTOR D TRANSISTOR 2 TRANSISTOR 2	SC2412K-QR	
L306 L307	1-412-006-31 1-408-609-41	INDUCTOR CHIP 10UH INDUCTOR 33UH		· V		ISTOR >	<b></b>	
L308	1-408-424-00							
L309	1-408-424-00	INDUCTOR 180UH		JR3	1-216-296-91		0 5%	1/8W
L310	1-408-407-00	INDUCTOR 6.8UH		JR8	1-216-295-91		0 5%	1/10W
				JR9	1-216-295-91		0 5%	1/10W
L401		INDUCTOR CHIP 68UH		JR10 JR12	1-216-295-91 1-216-295-91		0 5% 0 5%	1/10W 1/10W
/ ****		)01 - L1003 >	A 1 77\	JR13	1-216-295-91	MEMAT CLASE	0 5%	1/10W
(K)	.V-M2541A/M25411	)/M2541E/M2541K/M2541L/M25	410)	JR14	1-216-295-91		0 5%	1/10W
T1001	1 400 410 00	INDUCTOR 68UH		JR15	1-216-295-91		0 5%	1/10W
L1001 L1002	1-408-419-00 1-408-419-00			JR16	1-216-295-91		0 5%	1/10W
L1003	1-410-999-11	INDUCTOR CHIP 3.3UH		JR17	1-216-295-91		0 5%	1/10W
	< CO	IT. S		JR18	1-216-295-91	METAL GLAZE	0 5%	1/10W
	, ,	. <b>-</b> ,		JR19	1-216-295-91		0 5%	1/10W
T101	1-403-686-11	COIL		JR28	1-216-296-91	METAL GLAZE	0 5%	1/8W
1101	1 100 000 11			JR51	1-216-296-91		0 5%	1/8W
	< TRI	ANSISTOR >		JR52	1-216-295-91	METAL GLAZE	0 5%	1/10W
Q <b>4</b>	8-729-901-01	TRANSISTOR DTC144EK		JR55	1-216-296-91		0 5%	1/8W
Q8	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR56	1-216-296-91		0 5%	1/8W
Q11		TRANSISTOR 2SC2412K-QR		JR57	1-216-296-91		0 5%	1/8W
Q12	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR58	1-216-296-91		0 5%	1/8W
Q13	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-M2541A/M2540B)		JR59	1-216-296-91		0 5%	1/8W
				JR60	1-216-296-91		0 5%	1/8W
Q14	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR61	1-216-296-91		0 5%	1/8W
Q102	8-729-104-80			JR62	1-216-296-91		0 5%	1/8W
Q103	8-729-900-53	TRANSISTOR DTC114EK		JR63	1-216-296-91		0 5%	1/8W
		(KV-M2540B)		JR64	1-216-296-91	METAL GLAZE	0 5%	1/8W
Q104	8-729-900-53			TREE	1 216 206 01	MEMAI OLAGO	0 5%	1/8W
		(KV-M2540B)		JR65	1-216-296-91		0 5%	1/8W
0105		mpayeremon pmediatry		JR69	1-216-296-91 1-216-296-91		0 5%	1/8W
Q105	8-729-900-53	TRANSISTOR DTC114EK		JR70 JR71	1-216-296-91		0 5%	1/8W
0107	0 700 000 74	(KV-M2540B) TRANSISTOR 2SC2412K-QR		JR113	1-216-295-91		0 5%	1/10W
Q107	8-729-920-74	TRANSISTOR ZSCZ41ZK-QK TRANSISTOR IMX1		01113	1-210-233-31	MEIAL GLAZE	0 5.0	1/ 1011
Q108 Q116	8-729-907-20	TRANSISTOR DTC144EK-T147	,	JR120	1-216-295-91	METAL CLASS	0 5%	1/10W
ĞIIO	0-123-301-01	2540D/M2541D/M2540K/M2541K	· · · · · · · · · · · · · · · · · · ·	JR122	1-216-295-91		0 5%	1/10W
Q117	8-729-901-01	TRANSISTOR DTC144EK-T147 2540D/M2541D/M2540K/M2541F	1	UNIZZ		540D/M2541D/M		M2540K/
	(KV-M234UB/M	7341D/W7341D/W7340V/W7341F	ν,	JR123	1-216-295-91	METAL GLAZE	0 5%	1/10W
Q120	8-729-216-22	TRANSISTOR 2SA1162-G		01.223		2540D/M2541D/M		
Q121	8-729-216-22	TRANSISTOR 2SA1162-G			(11) 1111 1111	, , , , , , , , , , , , , , , , , , , ,	M2541K/M2541	L/M2541U)
0100		(KV-M2540B)		TD10F	1-216-295-91	Manar Grace	0 5%	1/10W
Q123	8-729-901-01			JR125	1-210-290-91			
Q125	8-729-900-53			TD126	1-216-295-91		541A/M2540E/N 0 5%	1/10W
0424		(KV-M2540B)		JR126 JR127	1-216-295-91		0 5% (KV-M2541L/M	1/10W
Q131	8-729-216-22	TRANSISTOR 2SA1162-G					(VA-WS-ATP)	123410)
Q132		TRANSISTOR 2SC2412K-QR		TD 201	1-216-295-91	מסגזי וגחסט	0 5%	1/10W
Q133		TRANSISTOR 2SC2412K-QR		JR201 JR401	1-216-295-91		0 5% 0 5%	1/10W 1/10W
Q134	8-729-900-53			UK4UI	T-710-733-31	(KV-M2540B/M2		
Q304	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR402	1-216-206-01	METAL GLAZE	.540D/M2540E/F 0 5%	1/10W
0312	0_700 000 74	TRANSISTOR 2SC2412K-QR		0.0402	T-710-737-37	(KV-M2540B/M2		
Q312 Q313	8-729-920-74 8-729-920-74					(ALT MADEUDING	, 112.74.01/1	
A212	0-143-340-14	TIMESTRION SPORTING AN		1				



													/ \
1	REF.NO.	PART NO.	DESCRIPTION	<u>.</u>		REMARK	REF.NO.	PART NO.	DESCRI	PTION			REMARK
	JR403	1-216-295-91	METAL GLAZE (KV-M2540B/M254	0 40D/M2		1/10W 540K)	R105 R106	1-216-025-00 1-216-025-00	METAL GLA METAL GLA		5% 5%	1/10W 1/10W	
	JR404	1-216-295-91		0		1/10W							
	JR405	1-216-295-91		0		1/10W	R107	1-216-053-00			5%	1/10W	
,	JR406	1-216-295-91	METAL GLAZE	0	5%	1/10W	R108 R109	1-216-059-00 1-216-180-00			5% 5%	1/10W 1/8W	
	JR407	1-216-295-91	METAL GLAZE	0	5%	1/10W	R110	1-216-057-00	METAL GLA		5% 5%	1/8W 1/10W	
	JR1004	1-216-295-91		0		1/10W	R111	1-216-057-00				1/10W	
•				•	•	_,					• •	_,,	
1	R1	1-216-049-00	METAL GLAZE	1K		1/10W	R112	1-216-065-00	METAL GLA			1/10W	
		1 016 005 00		100	(KV-M2		R113	1-216-073-00	METAL GLA		5%	1/10W	
	R6 R16	1-216-025-00 1-216-049-00	METAL GLAZE METAL GLAZE	100 1K		1/10W 1/10W	R114 R115	1-216-073-00 1-218-755-11	METAL GLA		5% 0.50%	1/10W	
,	V10	1-210-049-00	MEIAU GUAZE	IV	(KV-M2		R116	1-216-113-00	METAL CHI			1/10W	
					(	,						_, _,	
	R21	1-216-033-00		220		1/10W	R117	1-216-057-00			5%	1/10W	
	R24	1-216-049-00	METAL GLAZE	1K		1/10W	R118	1-216-107-00			5%	1/10W	
	R25 R26	1-216-073-00 1-216-025-00	METAL GLAZE METAL GLAZE	10K 100		1/10W 1/10W	R119 R121	1-216-049-00 1-216-035-00	METAL GLA		5% 5%	1/10W 1/10W	
	R27	1-216-025-00	METAL GLAZE	4.7K		1/10W	R122	1-216-089-91			5%	1/10W	
					-	_,						-,	
	R29	1-216-049-00	METAL GLAZE	1K		1/10W	R123	1-216-089-91			5%	1/10W	
	R31	1-216-049-00	METAL GLAZE	1K		1/10W	R124	1-216-031-00			5%	1/10W	
	R33 R35	1-216-063-00 1-216-065-00	METAL GLAZE METAL GLAZE	3.9K 4.7K		1/10W 1/10W	R125 R126	1-216-065-00 1-216-065-00			5% 5%	1/10W 1/10W	
	R44	1-216-121-00	METAL GLAZE	1M		1/10W	R127	1-216-041-00			5%	1/10W	
						•							
	R46	1-216-049-00	METAL GLAZE	1K		1/10W	R130	1-216-043-00			5%	1/10W	
	R47	1-216-073-00	METAL GLAZE METAL GLAZE	10K 100		1/10W	R131 R134	1-216-043-00 1-216-057-00			5% 5%	1/10W 1/10W	
	R49 R50	1-216-025-00 1-216-049-00	METAL GLAZE	100 1K		1/10W 1/10W	K134		40B/M2540D				
	R54	1-216-049-00	METAL GLAZE	1K		1/10W	R135	1-216-057-00				1/10W	
									40B/M2540D		540K/M	2541K)	
	R59	1-216-121-00	METAL GLAZE	1M		1/10W	2126	1 016 001 00			F0	4 (4 072	
	R60 R61	1-216-025-00 1-216-025-00	METAL GLAZE METAL GLAZE	100 100		1/10W 1/10W	R136 R139	1-216-081-00 1-216-065-00			5% 5%	1/10W 1/10W	
	R66	1-216-033-00	METAL GLAZE	220		1/10W	R140	1-216-089-91			5%	1/10W	
	R70	1-216-049-00	METAL GLAZE	1K		1/10W	R143	1-216-057-00	METAL GLA	ZE 2.2K	5%	1/10W	
	.=4							(KV-M25	40B/M2540D	/M2541D/M2	540K/M	25 <b>41</b> K)	
	R71 R72	1-216-081-00 1-216-081-00	METAL GLAZE METAL GLAZE	22K 22K		1/10W 1/10W	R144	1-216-059-00	MEMAI OTA	ZE 2.7K	E0.	1/10W	
	R73	1-216-081-00	METAL GLAZE	12K		1/10W	R146	1-216-057-00				1/10W	
	R75	1-216-081-00	METAL GLAZE	22K		1/10W	R147	1-216-033-00			5%	1/10W	
F	R76	1-216-073-00	METAL GLAZE	10K	5%	1/10W		(KV-M2541A/M2	540D/M2541	D/M2540E/M			
	.77	1 016 065 00	a	4 077	ro.	1 /102		1 016 021 00	VMM17 071	100		M2541K)	)
	R77 R78	1-216-065-00		4.7K 330		1/10W 1/10W		1-216-031-00	METAL GLA	7R 180	5% (KV-M2	1/10W	
	₹79	1-216-065-00		4.7K		1/10W		1-216-037-00	METAL GLAS	ZE 330		1/10W	
F	R82	1-216-073-00		10K		1/10W					541L/M		
F	₹83	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	7450	1 015 005 01		^		4 /4 0==	
T	₹84	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R150	1-216-295-91 (KV-M2541A/M2			5% 2540æ/1	1/10W (2541E)	,
	185	1-216-005-00	METAL GLAZE	100		1/10W		MY ALECSM- VA	740D/M27401		2540K/1		
F	₹86	1-216-025-00		100		1/10W		1-216-053-00	METAL GLAZ		_ • - • - • -	1/10W	
	187	1-216-073-00		10K		1/10W				(KV-M2	541L/M2	2541U)	
ŀ	888	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	D151	1-216-081-00	MEMAT OTAT	שרר יוד	E0.	1/10W	
F	189	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R151 R152	1-216-081-00			5% 5%	1/10W	
F	190	1-216-073-00		10K		1/10W	R160	1-216-049-00			5%	1/10W	
F	R91	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R161	1-216-031-00		ZE 180	5%	1/10W	
	192	1-216-049-00		1K		1/10W		(KV-M2541A/M2	540B/M2540I				
r	193	1-216-049-00	METAL GLAZE	1K	5%	1/10W		1-216-047-00	METAL CLAS		2540K/N 5%	12541K) 1/10W	1
F	194	1-216-039-00	METAL GLAZE	390	5%	1/10W		1 210 UH/-UU	WRITH GRAY		541L/M2		
F	195	1-216-049-00	METAL GLAZE	1K		1/10W				,		,	
	196	1-216-071-00		8.2K		1/10W	R162	1-216-017-00			5%	1/10W	
	197 199	1-216-049-00 1-216-049-00		1K		1/10W 1/10W	R163 R164	1-216-049-00 1-216-025-00	METAL GLAZ METAL GLAZ		5% <b>5</b> %	1/10W 1/10W	
r		1-210-043-00	METAD GRAVE	1K	J10	1/ 1011	R165		METAL GLAZ		5% 5%	1/10W	
	101	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R166	1-216-097-00	METAL GLAZ			1/10W	
	103	1-216-077-00	METAL GLAZE	15K		1/10W							
R	104	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R170	1-216-073-00	METAL GLAZ	ZE 10K	5%	1/10W	



REF.NO.	PART NO.	DESCRIPTION	<u>N</u>		REMARK	REF.NO.	PART NO.	DESCRIPTIO	N		REM	ARK
R171	1-216-035-00	METAL GLAZE		5%	1/10W	R352	1-216-123-11		1.2M		1/10W	
R172	1-216-295-91		-	5% 5%	1/10W	R354 R355	1-216-025-00 1-216-065-00		100 4.7K	5% 5%	1/10W 1/10W	
R173 R174	1-216-035-00 1-216-061-00			5%	1/10W 1/10W	R356	1-216-025-00		100	5%	1/10W 1/10W	
KI/I	1 210 001 00	min omic				R364	1-216-041-00		470	5%	1/10W	
R180	1-216-049-00	METAL GLAZE METAL GLAZE	1K 10K	5% 5%	1/10W 1/10W	R365	1-216-025-00	METAL CLATE	100	5%	1/10W	
R182 R183	1-216-073-00 1-216-067-00		5.6K		1/10W	KJUJ		540B/M2540D/M			•	
R185	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W						/M2541K)	
R186	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		1-216-027-00	METAL GLAZE	120 (KV-M	5% (2541)	1/10W /M2541U)	
R193	1-216-049-00	METAL GLAZE	1K	5%	1/10W				•			
	4 444 444 44		400	•	2540B)	R370	1-216-033-00		220 220	5% 5%	1/10W 1/10W	
R194 R195	1-216-180-00 1-216-113-00		180 470K	5% 5%	1/8W 1/10W	R371 R372	1-216-033-00 1-216-033-00		220	5%	1/10W 1/10W	
R196	1-216-017-00		47	5%	1/10W	R373	1-216-041-00	METAL GLAZE	470	5%	1/10W	
<b>2400</b>	1 016 000 00		220	F0.	1 /101	R380	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R199	1-216-037-00 (KV-M2541A/M2	METAL GLAZE 2540D/M2541D/M2	330 540E/M2	5% 25 <b>41E</b> /1	1/10W M2540K/	R381	1-216-025-00	METAL GLAZE	100	5%	1/10W	
	(				M2541K)	R382	1-216-053-00		1.5K		1/10W	
	1-216-051-00	METAL GLAZE	1.2K		1/10W M2540B)	R383 R384	1-216-049-00 1-216-053-00	METAL GLAZE METAL GLAZE	1K 1.5K	5% 5%	1/10W 1/10W	
	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R385	1-216-033-00	METAL GLAZE	1.5K	5%	1/10W	
			(KV-M25						450	<b>F</b> 0	4 /4 0**	
R200	1-216-047-00	METAL GLAZE	820	5%	1/10W	R386 R387	1-216-041-00 1-216-041-00		470 470	5% 5%	1/10W 1/10W	
R200	1-216-053-00			5%	1/10W	R388	1-216-041-00		470	5%	1/10W	
R204	1-216-025-00		100	5%	1/10W	R389	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R205 R206	1-216-025-00 1-216-049-00		100 1K	5% 5%	1/10W 1/10W	R390	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R200	1-210-043-00	MEIAU GUAZE	III	J-0		R392	1-216-091-00		56K	5%	1/10W	
R207	1-216-049-00		1K	5%	1/10W	R393 R407	1-216-089-91 1-216-198-91		47K 1K	5% 5%	1/10W 1/8W	
R210 R211	1-216-025-00 1-216-025-00		100 100	5% 5%	1/10W 1/10W	R407 R408	1-216-198-91	METAL GLAZE	5.6K		1/0W	
R216	1-216-083-00	METAL GLAZE	27K	5%	1/10W	R409	1-216-067-00	METAL GLAZE	5.6K		1/10W	
R217	1-216-031-00	METAL GLAZE	180	5%	1/10W	R410	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R220	1-216-174-00	METAL GLAZE	100	5%	1/8W	R413	1-216-023-00		220	5%	1/10W	
R305	1-216-049-00		1K	5%	1/10W	R415	1-216-067-00	METAL GLAZE	5.6K		1/10W	
D200	1 216 025 00	WEMAI GIAGE	(KV-M25	541L/M 5%	2541U) 1/10W	R417 R419	1-216-033-00 1-216-067-00	METAL GLAZE METAL GLAZE	220 5.6K	5% 5%	1/10W 1/10W	
R308 R309	1-216-025-00 1-216-025-00		100	5%	1/10W	Nail	1-210-007-00	HEIRE CHADE	3.01	3.0	1/1011	
					4.44	R420	1-216-033-00		220	5%	1/10W	
R311 R313	1-216-025-00 1-216-025-00		100 100	5% 5%	1/10W 1/10W	R421 R422	1-216-113-00 1-216-022-00	METAL GLAZE METAL GLAZE	470K 75	5% 5%	1/10W 1/10W	
R315	1-216-025-00		100		1/10W	R423	1-216-093-00		68K	5%	1/10W	
R316	1-216-025-00		100	5%	1/10W	R424	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R317	1-216-025-00	METAL GLAZE	100	5%	1/10W	R425	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R318	1-216-049-00		1K	5%	1/10W	R426	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R319	1-216-025-00		100	5% F%	1/10W	R427	1-216-188-00 1-216-067-00		390 5.6K	5% 5%	1/8W 1/10W	
R320 R321	1-216-025-00 1-216-025-00		100 100	5% 5%	1/10W 1/10W	R429 R430	1-216-089-91		47K	5%	1/10W 1/10W	
R322	1-216-067-00		5.6K		1/10W						4 (0**	
R323	1 016 040 00	METAL GLAZE	1 17	5%	1/10W	R431 R432	1-216-188-00 1-216-039-00		390 390	5% 5%	1/8W 1/10W	
R325	1-216-049-00 1-216-049-00		1K 1K	5%	1/10W	R432	1-216-067-00		5.6K		1/10W	
R326	1-216-077-00	METAL GLAZE	15K	5%	1/10W	R435	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R327 R328	1-216-097-00 1-216-025-00		100K 100	5% 5%	1/10W 1/10W	R437	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
	T-7T0-072-00		100	J-0		R438	1-216-089-91		47K	5%	1/10W	
R329	1-216-067-00		5.6K		1/10W	R439	1-216-071-00		8.2K		1/10W 1/10W	
R330 R331	1-216-033-00 1-216-033-00		220 220	5% 5%	1/10W 1/10W	R446 R447	1-216-025-00 1-216-025-00		100 100	5% 5%	1/10W 1/10W	
R332	1-216-033-00	METAL GLAZE	220	5%	1/10W	R454	1-216-089-91		47K	5%	1/10W	
R333	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	R458	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R340	1-216-097-00	METAL GLAZE	100K	5%	1/10W	R458 R464	1-216-049-00		1K	5%	1/10W	
R341	1-216-083-00	METAL GLAZE	27K	5%	1/10W	R465	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R342 R351	1-216-073-00	METAL GLAZE METAL GLAZE	10K 6.8K	5% 5%	1/10W 1/10W	R473 R474	1-216-022-00 1-216-049-00		75 1K	5% 5%	1/10W 1/10W	
VOOT		METAL GLAZE 2540B/M2540D/M			•	W414	1 210 049-00	ABIAD GUAD	T1/	J.0	A, AVII	
						ı						

The components identified by shading and marked in are critical for safety.

Replace only with the part number specified.





REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTIO	<u> </u>		REMARK
R477	1-216-067-00			<u> </u>	< TUN	ER >			
R482 R483	1-216-073-00 1-216-051-00	METAL GLAZE 10K 59	6 1/10W	TU101	1-693-185-11		H) (KV-M2541 M2541D/M2540 M2540K/M2541	E/M2541	.E/
		M254	40K/M2541K)		1-693-184-11	TUNER (U944C)			/
	1-216-047-00	METAL GLAZE 820 59 (KV-M254)	% 1/10W 1L/M2541U)		< CRY	STAL >			
R484 R485 R486 R487 R488	1-216-025-00 1-216-025-00 1-216-025-00 1-216-022-00 1-216-022-00	METAL GLAZE 100 55 METAL GLAZE 100 55 METAL GLAZE 75 55	% 1/10W % 1/10W % 1/10W	X2 X301 X1001	1-760-331-11 1-567-495-11 (KV-M2541A/M2	VIBRATOR, CEI VIBRATOR, CRY OSCILLATOR, ( 541D/M2541E/M2	YSTAL CRYSTAL 2541K/M2541I		
R489	1-216-022-00	METAL GLAZE 75 5	% 1/10W	******	*********	******	*******	******	******
		001 - R1029 >			*A-1638-052-A	C BOARD, COM	PLETE ****		
(KV		D/M2541E/M2541K/M2541L/	M2541U)		< CAF	ACITOR >			
R1001 R1002	1-216-295-91 1-216-025-00			C702	1-102-824-00	CERAMIC	470PF	5%	50V
R1004	1-216-049-00	METAL GLAZE 1K 5	% 1/10W	C703	1-102-115-00	CERAMIC	560PF	10%	50V
R1005 R1008	1-216-073-00 1-216-085-00	METAL GLAZE 33K 5	% 1/10W	C704 C706 C706	1-102-117-00 1-102-113-00 1-102-822-00	CERAMIC	820PF 390PF 390PF	10% 10% 5%	50V 50V 50V
R1009 R1010	1-216-025-00 1-216-053-00			C707	1-162-116-00		680PF	10%	2KV
R1011 R1012	1-216-053-00 1-216-053-00			C708 C709	1-162-114-00 1-102-114-00		0.0047MF 470PF	10%	2KV 50V
R1014	1-216-025-00			C710 C712	1-123-947-00	ELECT	10MF	20% 10%	250V 50V
R1015	1-216-025-00				1-102-115-00		560PF		
R1016 R1025	1-216-049-00 1-216-033-00			C714 C717	1-124-360-00 1-102-114-00	ELECT CERAMIC	1000MF 470PF	20% 10%	16V 50V
R1026	1-216-033-00	METAL GLAZE 220 5	% 1/10W	C718	1-102-114-00	CERAMIC	470PF	10%	50V 50V
R1027	1-216-033-00		,	C719	1-102-114-00		470PF	10%	201
R1029	1-216-025-00		% 1/10W			NECTOR >			
	< VAI	RIABLE RESISTOR >		CN701 CN703	1-508-768-00 *1-568-882-51	PIN, CONNECTO		CH) 6P	
RV102	1-241-765-11	RES, ADJ, CARBON 22K	(KV-M2540B)	CN705	1-695-915-11	TAB (CONTACT)	)		
	< RES	SISTOR NETWORK >			< DIC	DE >			
RA1		RESISTOR, NETWORK (CH		D701		DIODE RD9.1ES	SB3		
RA2 RA3		RESISTOR, NETWORK (CH RESISTOR, NETWORK (CH		D702 D703		DIODE 1SS133 DIODE 1SS133			
RA7 RA8	1-236-908-11	RESISTOR, NETWORK (CH NETWORK, RESISTOR (CH	IP TYPE)	D704 D705		DIODE 1SS133 DIODE 1SS133			
RA9 RA10		NETWORK, RESISTOR (CH RESISTOR, NETWORK (CH		D706 D707		DIODE 1SS133 DIODE 1SS133			
RA11	1-236-904-11	RESISTOR, NETWORK (CH	IP TYPE)	D708 D709		DIODE 1SS133 DIODE 1SS133			
	< FI	LTER >		D710		DIODE 188133			
SWF101		FILTER, SURFACE WAVE 2540B/M2540D/M2541D/M25		D711 D713	8-719-302-43 8-719-901-33	DIODE EL1Z DIODE 1SS133			
	1-760-330-11	M2540K/M25 FILTER, SURFACE WAVE			< CRI	SOCKET >			
SWF102		FILTER, SURFACE WAVE 2540D/M2541D/M2540E/M25 M2541K/M25		J701 A	1-526-990-11	(SOCIALIE) CINT			
	1-760-244-11	FILTER, SURFACE WAVE			< COI	L >			
				L704	1-408-609-41	INDUCTOR	33UH		
					< TRA	NSISTOR >			
				Q702	8-729-119-78	TRANSISTOR 25	SC2785-HFE		
				¥,02	0 .25 115 /0				



The components identified by shading and marked it are critical for safety.

Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	N		REMARK	REF.NO.	PART NO.	DESCRIPTI	ON		REMARK
Q703 Q704	8-729-906-70 8-729-200-17	TRANSISTOR BF				C514	1-136-165-00	FILM	0.1MF	5%	50V
Q705	8-729-119-78	TRANSISTOR 2S	C2785-HFE			C515	1-124-480-11	ELECT	470MF	20%	25V
Q706	8-729-906-70	TRANSISTOR BF	871			C517 C518	1-124-480-11 1-102-228-00	ELECT CERAMIC	470MF 470PF	20% 10%	25V 500V
Q707	8-729-200-17	TRANSISTOR 2S				C519 C520	1-102-228-00 1-124-480-11	CERAMIC ELECT	470PF 470MF	10% 20%	500V 25V
Q708 Q709	8-729-119-78 8-729-906-70	TRANSISTOR 2S	871								
Q̃710	8-729-200-17	TRANSISTOR 2S			C521 C522	1-124-006-11 1-124-907-11	ELECT ELECT	10MF 10MF	20% 20%	25V 50V	
< RESISTOR >						C523	1-136-165-00 1-161-742-00	FILM CERAMIC	0.1MF 0.0022MF	5% 20%	50V 400V
R704	1-216-486-00	METAL OXIDE	8.2K 5%		F	C601 A		CERAMIC	0.0047MF		250V
R705 R706	1-202-822-00 1-249-409-11	SOLID CARBON	2.2K 10' 220 5%			C602 A		CERAMIC	0.0047MF		250V
R707	1-249-408-11 1-202-844-00	CARBON SOLID	180 5% 330K 10	1/4W		C603 C604	1-125-318-00 1-124-122-11	ELECT (BLOCK) ELECT	220MF 100MF	20% 20%	400V 50V
R709				·		C605	1-124-667-11	ELECT	10MF	20%	100V
R711 R712	1-249-423-11 1-202-822-00	CARBON SOLID	3.3K 5% 2.2K 10			C606	1-162-318-11	CERAMIC	0.001MF	10%	500V
R713	1-215-493-00	METAL	1M 1%	1/4W	<b></b>	C607	1-124-120-11	ELECT	220MF	20%	25V
R714 R715	1-216-486-00 1-249-417-11	METAL OXIDE CARBON	8.2K 5% 1K 5%		F	C608 C611	1-109-880-11 1-102-228-00	FILM CERAMIC	0.0015MF 470PF	3% 10%	2KV 500V
R716		CARBON	220 5%	·		C612 C613	1-104-799-11 1-124-347-00	ELECT ELECT	22MF 100MF	20% 20%	100V 160V
R717	1-249-409-11 1-249-408-11	CARBON	180 5%	1/4W							
R718 R720	1-202-814-11 1-249-423-11	SOLID CARBON	33K 10			C614 C615	1-126-804-11 1-126-376-11	ELECT ELECT	100MF 470MF	20% 20%	25V 25V
R722	1-202-848-00	SOLID	680K 10			C616	1-128-386-11	ELECT	1000MF	20%	25V
R723	1-249-417-11	CARBON	1K 5%			C617 C618	1-126-183-11 1-136-165-00	ELECT FILM	1000MF 0.1MF	20% 5%	16V 50V
R724 R726	1-202-846-00	SOLID SOLID	470K 10	% 1/2W		C619	1-102-228-00	CERAMIC	470PF	10%	500V
R727	1-249-409-11	CARBON	220 5%	1/4W		C620	1-102-228-00	CERAMIC	470PF	10%	500V
R728	1-216-350-11	METAL OXIDE	1.2 5%	1W	F	C621 C622	1-136-165-00 1-104-797-11	FILM ELECT	0.1MF 0.47MF	5% 20%	50V 100V
R729	1-249-408-11	CARBON	180 5%			C623	1-124-120-11	ELECT	220MF	20%	25V
R731 R732	1-249-423-11 1-215-479-00	CARBON METAL	3.3K 5% 270K 1%			C624	1-136-165-00	FILM	0.1MF	5%	50V
R734 R736	1-247-807-31 1-216-486-00	CARBON	100 5% 8.2K 5%		F	C625 C626	1-124-910-11 1-124-120-11	ELECT ELECT	47MF 220MF	20% 20%	50V 25V
		METAL OXIDE			•	C627	1-124-120-11	ELECT	220MF	20%	25V
R737 R739	1-215-489-00 1-249-417-11	METAL CARBON	680K 1% 1K 5%			C628	1-124-907-11	ELECT	10MF	20%	50V
R741	1-202-549-00	SOLID	100 20	% 1/2W		C629 C630	1-126-800-51 1-126-800-51	ELECT ELECT	2200MF 2200MF	20% 20%	35V 35V
R743	1-202-842-11	SOLID		% 1/2W		C631	1-124-916-11	ELECT	22MF	20%	50V
	< VAF	RIABLE RESISTOR	<b>:</b> >			C632 C633 A	1-124-120-11 1-107-564-11	ELECT	220MF 0.22MF	20% <b>20%</b>	25V <b>300V</b>
RV701 RV702		RES, ADJ, MET RES, ADJ, MET					1-107-564-11		0.22MP	20%	300V
		RES, ADJ, MEI				C635 A	1-107-564-11	PILM	0.22MF	20%	300Y
* * * * * * * * * * * * * * * * * * * *						C639	1-161-742-00 1-136-165-00	FILM	0.0022MF 0.1MF	20% 5%	<b>400V</b> 50V
	*A-1642-121-A	D BOARD, COMP				C640	1-106-220-00	MYLAR	0.1MF	10%	100V
	A 201 022 01	מסארשם דאומייי	አመተክር			C647 C800	1-162-116-00 1-137-437-11		680PF 0.0056MF	10% 5%	2KV 50V
9	4-201-023-01 4-202-373-01	SPACER, INSUL SPRING, IC	MITING			C801	1-136-153-00	FILM	0.01MF	5%	50V
	, CM	PACITOR >				C804 C805	1-136-165-00 1-106-395-00		0.1MF 0.15MF	5% 10%	50V 200V
C502			470PF	5%	50V	C806	1-108-704-11		0.1MF	10%	200V
C503	1-102-824-00 1-136-165-00	FILM	0.1MF	5%	50V	C807	1-136-111-00	FILM	1MF	5%	200V
C504 C506	1-102-824-00 1-124-480-11		470PF 470MF	5% 20%	50V 25V	C810 C811	1-124-634-11 1-102-212-00		1MF 820PF	20% 10%	250V 500V
C507	1-124-767-00		2.2MF	20%	50V	C812	1-136-111-00		1MF	5%	200V
C509	1-136-165-00		0.1MF	5%	50V	C813	1-136-759-11		0.039MF	10%	630V
C510 C511	1-124-911-11 1-136-202-11		220MF 0.33MF	20% 5%	50V 63V	C814 C815	1-136-591-11 1-136-562-11		0.017MF 0.0082MF	3% 10%	1.4KV 400V
C511	1-106-220-00		0.35MF	10%	100V	C816	1-161-754-00		0.001MF	10%	2KV

The components identified by shading and marked is are critical for safety.

Replace only with the part number specified.



REF.NO.	PART NO.	DESCRIPTION REMARK		REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
C817	1-161-754-00	CERAMIC	0.001MF	10%	2KV	D506		DIODE 1SS133 DIODE RD5.1ESB2	
C818	1-162-134-11	CERAMIC	470PF	10%	2KV	D600		DIODE D4SB60L	
C819	1-136-208-11		0.068MF	10%	250V	D601		DIODE EM1-V1	
C820	1-102-114-00		470PF	10%	50V	D603	8-719-109-97	DIODE RD6.8ESB2	
C821	1-162-114-00		0.0047MF	200	2KV	DCOA	0 710 046 75	DTODE 777 4 174	
C822	1-123-948-00	ELECT	22MF	20%	250V	D604 D605	8-719-046-75 8-719-312-61	DIODE EU-1-V1	
C824	1-123-024-21	ELECT	33MF		160V	D606		DIODE EU-1Z	
C829	1-124-902-00		0.47MF	20%	50V	D607		DIODE EG-1Z-V1	
C830	1-136-165-00	FILM	0.1MF	5%	50V	D608	8-719-046-75	DIODE EU-1-V1	
C832	1-136-173-00		0.47MF	5%	50V				
C834	1-126-233-11	ELECT	22MF	20%	25V	D609	8-719-301-64		
C835	1-162-318-11	CEDAMIC	0.001MF	10%	500V	D610 D611	8-719-046-74	DIODE AU-01Z-V1	
C836	1-162-117-00		100PF	10%	500V	D611		DIODE RU-3YX-V1	
C838	1-102-228-00	CERAMIC	470PF	10%	500V	D613	8-719-302-43		
C906	1-124-910-11	ELECT	47MF	20%	50V				
C908	1-124-910-11	ELECT	47MF	20%	50 <b>V</b>	D614	8-719-302-43		
C909	1-124-903-11	DI DAM	11/0	200	F 011	D615		DIODE EU-1-V1	
C910	1-137-393-91		1MF 0.01MF	20% 5%	50V 100V	D616 D617		DIODE RD7.5ESB2 DIODE 1SS133	
C1200	1-136-165-00		0.1MF	5%	50V	D618		DIODE 188133	
C1201	1-136-165-00		0.1MF	5%	50V		0 120 002 00	21022 10010	
C1202	1-136-165-00	FILM	0.1MF	5%	50V	D619		DIODE 1SS133	
01000	1 126 160 00		0.0045	<b>5</b> 0	r. 0 ***	D620		DIODE 188133	
C1203 C1204	1-136-169-00 1-136-169-00		0.22MF 0.22MF	5% 5%	50V 50V	D622 D625	8-719-921-69	DIODE MTZJ-9.1 DIODE 1SS133	
C1205	1-101-005-00		0.22MF	3/0	50V	D625		DIODE AU-01Z-V1	
C1206	1-101-005-00		0.022MF		50V	5020	0 713 040 74	DIODE RO-UIZ-VI	
C1207	1-126-101-11	ELECT	100MF	20%	16V	D800	8-719-901-33		
<b>01000</b>	1 104 005 11		4 5145	000	50	D801		DIODE 1SS133	
C1208 C1209	1-124-927-11 1-124-927-11		4.7MF 4.7MF	20% 20%	50V	D802	8-719-901-33		
C1210	1-124-925-11		2.2MF	20%	50V 50V	D803 D807	8-719-908-03 8-719-302-43	DIODE GP08D	
C1211	1-124-925-11		2.2MF	20%	50V	2007	0 /15 502 45	DIODE BEIN	
C1214	1-126-101-11		100MF	20%	16V	D808	8-719-908-03	DIODE GP08D	
~4.54.5						D809		DIODE RGP02-20EL-6394	
C1215 C1216	1-136-173-00		0.47MF	5%	50V	D810	8-719-302-43		
C1217	1-137-366-11 1-137-366-11		0.0022MF 0.0022MF	5% 5%	50V 50V	D812 D815	8-719-908-03	DIODE FMS-3FU-LF027-103	
C1218	1-124-120-11		220MF	20%	16V	2013	0 717 700 03	DIODE GIVOD	
						D817	8-719-109-89	DIODE RD5.6ESB2	
	< CON	NECTOR >				D902	8-719-921-69	DIODE MTZJ-9.1	
CN600 a	1-508-786-00		NOD (EUR DIT	out on		D903 D904	8-719-921-69 8-719-921-69	DIODE MTZJ-9.1 DIODE MTZJ-9.1	
	1-508-765-00					1		DIODE MTZJ-9.1	
CN602 A	*1-695-292-11							<del>-</del>	
CN800	*1-580-798-11					D906		DIODE MTZJ-9.1	
CN803	1-695-915-11	TAB (CONTACT	r)			D1201 D1202		DIODE RD3.9ESB2	4 /4
CN804	1-508-768-00	PIN. CONNECT	TOR (5MM PTT)	СН) бр		D1202	1-247-807-31	CARBON 100 5%	1/4 <b>W</b>
CN807	1-568-878-51			011, 01			< FER	RITE BEAD >	
CN901	*1-564-520-11							<b></b>	
CN902	1-695-299-11			RD 50P		FB600		FERRITE BEAD INDUCTOR 1.1	
CN903	*1-564-516-11	PLUG, CONNEC	CTOR 13P			FB601		FERRITE BEAD INDUCTOR 1.1	
CN904	*1-564-509-11	PLUG. CONNEC	TOR 6P			FB602 FB604	1-410-397-41	FERRITE BEAD INDUCTOR 1.1 FERRITE BEAD INDUCTOR 0.4	.UH I STTU
CN904	*1-568-881-51					FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.4	5UH
CN905	*1-564-509-11								
CN905	*1-568-878-51					FB606		FERRITE BEAD INDUCTOR 1.1	
CN1200	*1-568-879-11	PIN, CONNECT	TOK 4P			FB607	1-410-397-21	FERRITE BEAD INDUCTOR 1.1	.UH
CN1201 *1-568-878-51 PIN, CONNECTOR 3P							< IC	>	
	< DIO	DE >				IC500	8-759-192-71	IC STV9379	
DEOO	0 840 400 05	DIADE 225 15	10D0			IC600	8-759-183-88		\$1447775-\$2 mare 20182211722824142880.aa-0000
D500 D502	8-719-109-85 8-719-979-85					IC601 /		IC TLP721 (D4) -GR	
D502	8-719-979-85					IC602		IC SE135N-LF12 IC LM2940CT-5.0	
D504	8-719-901-33	DIODE 1SS133	}			-3000	J . J J J J J J 1	majtot J.V	
D505	8-719-982-03	DIODE MTZJ-3	3.6A		i	IC604	8-759-250-63	IC TL750L05CLPR	



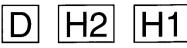
The components identified by shading and marked in are critical for safety.

Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTIO	<u>DN</u>	REMARK
IC605 IC606 IC800 IC1200	8-759-701-79 8-759-267-25 8-759-103-93 8-759-279-43	IC NJM7812FA IC LM2940T-90 IC UPC393C IC TDA7261		R510 R517 R518	1-249-443-11 (-1-215-427-00 1-215-427-00	METAL METAL	0.47 5% 1.8K 1% 1.8K 1%	1/4W F 1/4W 1/4W
IC1201	8-759-502-21	IC TDA2822M		R520 R521 R522	1-215-457-00 1-215-459-00 1-249-433-11	METAL CARBON	33K 1% 39K 1% 22K 5%	1/4W 1/4W 1/4W
L502 L503 L609 L611	1-412-519-11 1-412-519-11 1-412-533-21 1-412-527-11	INDUCTOR 3.3UH INDUCTOR 3.3UH INDUCTOR 47UH INDUCTOR 15UH		R523 R524 R525 R526 R527	1-249-433-11 1-249-425-11 1-249-425-11 1-249-421-11 1-215-449-00	CARBON CARBON CARBON	22K 5% 4.7K 5% 4.7K 5% 2.2K 5% 15K 1%	1/4W 1/4W 1/4W 1/4W 1/4W
L612 L613 L801 L802 L803 L804	1-414-415-11 1-459-111-00 1-459-104-00 1-420-872-00 1-409-770-11	INDUCTOR 3.3UH INDUCTOR 3.3UH INDUCTOR 3.3UH INDUCTOR 47UH INDUCTOR 15UH INDUCTOR, WIDE BAND  INDUCTOR, WIDE BAND  COIL, DRAM CORE (CDI) COIL, AIR CORE COIL, AIR CORE COIL, HORIZONTAL LINEAR: COIL, CHOKE 4.7MMH INDUCTOR 47UH  LINK >  LINK, IC 2.7A (ICP-875)	ITY	R528 R529 R600 R601 R603	1-259-877-11 1-247-895-00 1-216-490-71 1-249-417-11 1-215-875-11	CARBON METAL OXIDE CARBON	1.2M 5% 470K 5% 39K 5% 1K 5% 10K 5%	1/4W 1/4W 3W F 1/4W 1W F
L805 L809	1-406-675-11 1-412-533-21	COIL, CHORE 4.7MMH INDUCTOR 47UH		R604 R605 R607 R608	1-249-420-11 1-216-362-71 1-216-421-71 1-216-365-00 1-249-417-11	METAL OXIDE METAL OXIDE METAL OXIDE	1.8K 5% 0.27 5% 12 5% 0.47 5% 1K 5%	1/4W 2W F 1W F 2W F 1/4W
PS600 // PS601 // PS602 // PS603 // PS801 //	* 1-532-686-21 * 1-532-686-21 * 1-532-686-21 * 1-532-686-21 * 1-532-686-21 * 1-532-605-00	LINK >  LINK, IC 2.7A (ICP-F75)  LINK, IC 2.7A (ICP-F75)  LINK, IC 2.7A (ICP-F75)  LINK, IC 2.7A (ICP-F75)  LINK, IC 3.7A (ICP-F16)		R611 R612 R613 R614 R615	1-215-859-00 1-249-428-11 1-249-417-11	METAL OXIDE CARBON CARBON METAL OXIDE	22 5% 8.2K 5% 1K 5% 22K 5% 33K 5%	1W F 1/4W 1/4W 1W F 1/4W
		ANSISTOR >		R616	1-215-479-00	METAL	270K 1%	1/4W
Q501 Q502 Q503	8-729-119-78 8-729-173-38 8-729-900-89	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SA733-K TRANSISTOR DTC144ES		R617 R618 R619 R620	1-215-901-00 1-249-429-11 1-216-425-11 1-247-895-00	CARBON METAL OXIDE	33K 5% 10K 5% 56 5% 470K 5%	2W F 1/4W 1W F 1/4W
Q601 Q602 Q603 Q604	8-729-025-05 8-729-320-28 8-729-027-08 8-729-024-35	TRANSISTOR 2SA1667 TRANSISTOR 2SC2389STP-R		R621 R622 R623 R624	1-216-425-11 1-249-437-11 1-249-429-11 1-249-405-11	CARBON	56 5% 47K 5% 10K 5% 100 5%	1W F 1/4W 1/4W 1/4W F
Q605 Q606 Q607	8-729-119-78 8-729-900-65 8-729-119-78	TRANSISTOR 2SC2785-HFE TRANSISTOR DTA144ES TRANSISTOR 2SC2785-HFE		R625 R626 R628	1-249-434-11 1-249-430-11 1-249-415-11	CARBON CARBON	27K 5% 12K 5% 680 5%	1/4W 1/4W 1/4W F
Q800 Q801 Q802 Q803 Q805	8-729-119-78 8-729-017-06 8-729-016-32 8-729-119-80 8-729-900-89	TRANSISTOR 2SC4793 TRANSISTOR 2SC4927-01 TRANSISTOR 2SC2688-LK		R630 A	1-214-937-00 1-218-265-11 1-205-949-11 1-247-807-31	METAL GLAZE WIREWOOND	1M 5% 8.2M 5% 1.8 5% 100 5%	1/2W 1W 10W 1/4W
Q1200 Q1201 Q1202 Q1203	8-729-119-78 8-729-119-78 8-729-900-80 8-729-900-74	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR DTC114ES TRANSISTOR DTC143TS		R633 R634 R635 R636	1-247-807-31 1-249-397-11 1-249-437-11 1-249-417-11	CARBON CARBON CARBON CARBON	100 5% 22 5% 47K 5% 1K 5%	1/4W 1/4W F 1/4W 1/4W
Q1204	8-729-900-74	TRANSISTOR DTC143TS		R637 R638	1-249-409-11 1-249-433-11	CARBON	220 5% 22K 5%	1/4W 1/4W
JW800	< RE 1-259-880-11	SISTOR > 2.2M 5%	1/4W	R639 R640 R641		CARBON METAL OXIDE METAL OXIDE	10K 5% 0.22 5% 0.22 5%	1/4W 3W F 3W F
R500 R502 R503 R504 R505	1-215-457-00 1-249-421-11 1-249-429-11 1-215-463-00 1-249-382-11	METAL       33K       1%         CARBON       2.2K       5%         CARBON       10K       5%         METAL       56K       1%	1/4W 1/4W 1/4W 1/4W 1/4W F		1-205-949-11 1-249-423-11 1-247-807-31 1-249-422-11 1-249-377-11	WIREWOUND CARBON CARBON CARBON		1/4W 1/4W 1/4W 1/4W 1/4W F
R506 R507 R508 R509	1-215-413-00 1-215-888-00	METAL 470 1% METAL OXIDE 220 5% METAL OXIDE 1.5 5%	1/4W 2W F 2W F 1/4W F	R647 R648 R800 R801	1-202-933-61 1-216-397-11 1-249-421-11 1-249-429-11	METAL OXIDE CARBON	0.1 10% 4.7 5% 2.2K 5% 10K 5%	1/2W F 3W F 1/4W 1/4W

The components identified by shading and marked for are critical for safety.

Replace only with the part number specified.



REF.NO.	PART NO.	DESCRIPTIO	<u>N</u>			REMARK	REF.NO.	PART NO.	DESCRIPT	ION		REMARK
R802	1-249-431-11	CARBON	15K	5%	1/4W			< REI	LAY >			
R803	1-249-426-11		5.6K			e de la companya de l	RY600 4	. 1-515-720-31	RELAY			
R804 R805	1-249-430-11 1-249-425-11	CARBON	12K 4.7K		5% 1/4W	•		< SPA	ARK GAP >			
R809 R812	1-247-901-11 1-249-421-11		820K 2.2K		1/4W 1/4W		SG801	1-519-422-11	GAP, SPARK			
R813	1-215-869-11		1K	5%	1W	F		< TRA	ANSFORMER >			
R814 R816	1-249-411-11 1-215-918-00	METAL OXIDE	330 1.5K		1/4W 3W	F		. 1-421-776-11				
R817 R818	1-215-918-00 1-215-882-00	METAL OXIDE METAL OXIDE	1.5K 22	5% 5%	3W 2W	F F	T601 A	1-421-776-11 1-426-805-11	TRANSFORMER			
R819	1-216-345-11		0.47		1W	F	T800 T <b>803</b> 2	1-421-794-21 1-453-169-11				
R820 R821	1-249-403-11 1-215-909-11	METAL OXIDE	68 47	5% 5%	1/4W 3W	F	T804	1-437-090-00	HDT			
R822 R824	1-215-868-00 1-249-420-11		680 1.8K	5% 5%	1W 1/4W	F		< THI	ERMISTOR >			
R826	1-247-752-11		1K_	5%	1/2W		<b>THP</b> 600 /1	1-809-827-11	THERMISTOR,	POSITIVE		
R827 R828	1-249-425-11 1-249-433-11	CARBON	4.7K 22K	5%	1/4W 1/4W		******	******	******	******	******	******
R829 R830	1-215-463-00 1-217-778-11		56K 1K	1% 5%	1/4W 1W	F		*1-652-269-11	H2 BOARD			
R833 R836	1-249-421-11 1-249-439-11		2.2K 68K	5% 5%	1/4W 1/4W	F		< CA1	PACITOR >			
R837 R840	1-215-449-00	METAL	15K 100	1% 5%	1/4W 1/4W		C904	1-124-910-11	-	47MF	20%	50V
R841	1-249-418-11		1.2K		1/4W		C905	1-124-907-11		10MF	20%	50V
R842 R843	1-249-441-11 1-247-903-00		100K 1M	5% 5%	1/4W 1/4W			< CO1	NNECTOR >			
R846 R847	1-249-441-11	CARBON	100K 330K	5%	1/4W 1/4W		CN907 CN907	*1-564-509-11 *1-568-881-51				
R848	1-247-887-00		220K		1/4W			< DIC	,			
R849 R850	1-249-429-11 1-249-425-11		10K 4.7K	5% 5%	1/4W 1/4W		D901	8-719-030-11	DIODE SLA-5	70KT3F		
R851 R852	1-247-755-11 1-249-432-11	CARBON	1.8K 18K	5% 5%	1/2W 1/4W	F		< IC	>			
R901	1-202-539-00		39	10%	1/2W		IC900	8-741-790-11	IC SBX1790-	11		
R902 R907	1-202-539-00 1-247-804-11		39 75	10% 5%	1/2W 1/4W			< RES	SISTOR >			
R916 R917	1-249-397-11 1-249-397-11		22 22	5% 5%	1/4W 1/4W		R900	1-249-409-11	CARBON	220 5%		
R1200	1-249-425-11	CARBON	4.7K	5%	1/4W		R908	1-249-401-11		47 5%	•	
R1201 R1202	1-249-434-11 1-249-393-11		27K 10	5% 5%	1/4W 1/4W	F	******	**********		*******	*******	******
R1203 R1204	1-249-421-11 1-249-421-11		2.2K 2.2K		1/4W 1/4W			*1-652-275-11	H1 BOARD			
R1205	1-249-428-11	CARBON	8.2K	5%	1/4W			< CAI	PACITOR >			
R1206 R1207	1-249-428-11 1-249-417-11		8.2K 1K	5% 5%	1/4W 1/4W		C900	1-101-810-00	CERAMIC	100PF	5%	500V
R1208 R1209	1-212-849-00 1-212-849-00		4.7 4.7	5% 5%	1/4W 1/4W		C902 C903	1-137-372-11 1-137-372-11		0.022MF 0.022MF	5% 5%	50V 50V
R1210	1-249-417-11		1K	5%	1/4W		C907	1-124-903-11	ELECT	1MF	20%	50V
R1211 R1212	1-249-424-11 1-249-424-11		3.9K 3.9K		1/4W 1/4W				NECTOR >			
R1213 R1216	1-249-421-11 1-249-413-11	CARBON	2.2K 470		1/4W 1/4W		CN900 CN906	1-569-793-11 *1-564-516-11				
R1217	1-249-425-11		4.7K		1/4W				CKET >			
	< VA	RIABLE RESISTO	₹ >				J900 1-764-606-11 JACK					
RV301	1-238-552-11	RES, ADJ, CAI	RBON 4	70K								



The components identified by shading and marked A are critical for safety. Replace only with the part number specified.

		)					opodinod.		
REF.NO.	PART NO.	DESCRIPT	ION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
	< COI	L >			ACCESSORIES AND PACKING MATERIALS				
L900 L901 L903	1-408-409-00 1-408-409-00 1-408-409-00	INDUCTOR	10UH 10UH 10UH		*	1-202-829-51 1-202-829-11	MANUAL INSTRUCTION (KV- MANUAL INSTRUCTION (KV- MANUAL INSTRUCTION (KV- MANUAL INSTRUCTION (KV-	-M2540B) -M2540D/M2541D)	
			25 50	4 / 4**			MANUAL INSTRUCTION (KV		
R905 R906 R910 R915	1-247-804-11 1-247-804-11 1-249-437-11 1-249-397-11	CARBON CARBON CARBON	75 5% 75 5% 47K 5% 22 5%	1/4W 1/4W 1/4W 1/4W		1-202-829-61 *4-384-027-01 *4-200-647-12	MANUAL INSTRUCTION (KV- MANUAL INSTRUCTION (KV- BAG, PROTECTION CUSHION (UPPER) (ASSY) CUSHION (LOWER) (ASSY)		
	*1-652-270-11	H3 BOARD				*4-202-212-01	INDIVIDUAL CARTON		
	< CON	INECTOR >					REMOTE COMMANDER		
CN908 CN908	*1-564-506-11 *1-568-878-51					1-467-706-11	COMMANDER (RM-833)		
	< RES	SISTOR >			*****	*******	*******	******	
R911 R912 R913 R914	1-249-423-11 1-249-429-11 1-249-423-11 1-249-429-11	CARBON CARBON	3.3K 5% 10K 5% 3.3K 5% 10K 5%	1/4W 1/4W 1/4W 1/4W					
	< SWI	TCH >							
S900 S901 S902	1-692-979-11 1-692-979-11 1-692-979-11	SWITCH, TAC	TILE						
******	******	******	******	*****					
		ELLANEOUS							
Å	1-402-746-11 8-451-311-34 1-504-698-11 1-452-032-00 1-452-094-00	DEFLECTION SPEAKER MAGNET, DIS	YOLK (Y25FX)						
	1-751-680-11 1-590-460-11	CORD POWER	(NV-M2541A/B (NITH COMMEC (KV-M2540B/B	12540D/M2541D) (# 170R) 170R) 12540B/M2541B/ (# 170					
4,	1-590-762-11	CORD POWER	(WITH PLUG)	(2540K/M2541K) (2541U/M2541L)					

1-693-185-11 TUNER (UV916H) (KV-M2541A/M2540B/

1-453-169-11 FBT ASSY (UX1604A2) V901 1 8-733-231-05 CRT SD-178 (A59JWC61X)

1-693-184-11 TUNER (U944C)

M2540D/M2541D/M2540E/M2541E/ M2541L/M2540K/M2541K)

(KV-M2541U)